

DAILY SCRAMBLE—Crew of Convair's No. 1 modified 880, now in flight test, boards plane in familiar routine for 58th flight over usual flight pattern off Southern California coast. Two production 880-Ms are now on assembly line at Convair San Diego with first deliveries scheduled late this year.

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SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.



FIRST CREW—Permanent members of first 880-M crew are (from top to bottom) W. H. Harse, captain; H. G. Schuette and E. R. Cain, flight test engineers; W. G. Walker, instrumentation engineer; J. M. Fitzpatrick, co-pilot; F. E. Wilson, instrumentation engineer; D. T. Kjell, flight engineer.

Flight Time On Jet 880-M Tops 100 Hrs.

Convair's first 880-M jet transport has chalked up just over 100 hours in the air since its maiden flight the first part of October. Now in a several-month engineering flight test program is the modified version of the basic 880, designed for use over short and medium-range airline routes.

Captain of the crew piloting the Convair jet airliner over its usual over-water flights, off the Southern California coast from San Clemente Island to the Coronadoes and back to home field, is W. H. Harse, co-pilot on the plane's initial flight. The first 880-M had made 58 flights up to Dec. 22.

Permanent crew assigned to the plane during the engineering flight test program includes Harse, formerly with the F-102/F-106 program as engineering flight test pilot at Edwards AFB. He returned to San Diego plant last year to take part in the commercial plane program.

Co-pilot is J. M. Fitzpatrick, chief test pilot for Convair at Holloman AFB during the last year-and-a-half. He went to the New Mexico facility from Edwards where he had been test pilot on Convair jet interceptors since the beginning of the F-102 program in 1954. He came back to San Diego in October to join the 880 testing effort.

D. T. Kjell, flight engineer, is the only other charter member, besides Harse, of the plane's permanent crew. He has been with Convair's commercial program since last year and the first flight engineer of the flight test engineering group to receive his FAA-approved certificate under the revised CAB ruling. All of Convair SD's pilots and flight engineers, in both engineering flight test and production flight, are now qualified by the FAA with the same-type certificates required of commercial flight crews.

The flight test engineers with the No. 1 880-M are H. G. Schuette and E. R. Cain. Schuette returned to San Diego this spring from Lexington, Mass., where he had been Convair's flight test supervisor with the SAGE integration test program.

(Continued on Page 2)

Northeast Debut For 880s Marked By Snow and Ice

Convair 880s going into service in mid-December with Northeast Airlines were baptized in one of the worst storms ever to hit the East Coast. Snowbanks and near-zero weather set the wintery stage for inauguration flight of the first plane Dec. 15 as it lifted off the Boston runway with a full load of passengers bound for Miami via Philadelphia.

L. J. Bordelon, chief of transport service at Convair SD, representing Convair, said that, in spite of their first real taste of freezing weather conditions, "880s were controlled with no major difficulties."

President of Northeast Airlines, James Austin, at dedication ceremonies at Logan International Airport, Boston, expressed Northeast's pride in starting jet operations with Convair 880 airliners. The first 880 to fly from Boston over a regular passenger route carried the blessing of Richard Cardinal Cushing.

Bordelon, who accompanied the plane on the first scheduled flight, said that passengers' remarks en route indicated that they enjoyed the 880's comfort and quietness, especially in the rear passenger cabin. Many were overheard to say that the 880 was a definite improvement over

(Continued on Page 2)

Dept. Goals Established For ESs and CIPs in '61

Establishment of 1961 cost reduction dollar goals for each department at Convair San Diego was announced this week by R. C. Loomis, Convair vice president and San Diego operating division manager.

Each Convair SD person will be able to help his department reach its target by submitting either Employee Suggestions (for hourly personnel) or Cost Improvement Proposals (for flat-salaried people).

Under the new program each department will know exactly what it is expected to contribute toward the reduction of operating costs.

Loomis said the total dollar target for the division has been set at $2½ million. This, in turn, has been broken into dollar targets for direct departments ($1,050,000) and indirect departments ($1,450,000).

Targets are based on the 1960 ES and CIP total dollar savings. Forty-two per cent was established for direct departments, and 58 per cent for indirect departments. An additional 10 per cent improvement factor was then added.

Department targets range from minimums of $10,000 to a maximum of $200,000 (for engineering, Dept. 6). They are based on employment, type of department operation and past operations.

"I feel that the dollar targets established are realistic," said Loomis. "If each person applies himself diligently this division will go over the 1961 goal."

Throughout the year each department will be notified of its current cost reduction ranking by means of a progress chart which will be issued monthly.

Employee Suggestion forms are available in ES boxes located throughout the plant; Cost Improvement Proposal forms may be obtained by calling ext. 1111, Plant 1. The establishment of targets does not affect any of the regular features of either the ES or CIP program.

Club to Hear NMA Speaker

W. Ballentine Henley, one of National Management Association's top speakers, has been engaged for the Jan. 18 meeting of Convair San Diego Management Club.

An additional featured attraction at the meeting will be a special drawing for two shares of General Dynamics common stock. El Cortez Hotel will be the setting for the affair sponsored by division controllers departments.

Henley has earned four academic degrees in such varied fields as government, law, religion and history. His topic will be "Tomorrow Is Arriving." He will outline new economic concepts in housing, health, transportation, communication, etc.

Girls to Be Included In New Scholarships

General Dynamics Corporation this week announces a new undergraduate scholarship program which will benefit Convair daughters as well as sons. For details, see page 3.



QUARTER CENTURY—Most of above are members of unique Convair group which has celebrated its New Year's Eves together for 25 years. Tradition was started in 1935 when Consolidated Vultee moved to San Diego. From left: Mr. and Mrs. Wesley Schlagenhauf, Mr. and Mrs. Ralph Skinner, Mr. and Mrs. William Milton, Mr. and Mrs. Charles Brady, Mr. and Mrs. Albert Bossert, Mr. and Mrs. Arnold Springer, Mr. and Mrs. Benjamin Kiegle, Mr. and Mrs. Welton Stone, Mr. and Mrs. Leo Klingenmeier, and Mrs. Clara Patton.

Convair Alumni Renew Pledge They've Made For Last 25 Years

Most New Year's Eve parties are quickly forgotten, but not so the one attended by 17 active and retired Convair employees and their spouses last Saturday.

It was the 25th consecutive New Year's Eve party attended by the same persons!

Start of the tradition was in 1935, when Consolidated Vultee shifted its base of operation from Buffalo, N.Y., to San Diego.

Meeting that year at a New Year's Eve dance, 12 company couples continued the party at the home of Charles Brady. At that time the new friends pledged they would meet thereafter on every New Year's Eve.

Now, 25 New Year's Eves later, 17 of the original 24 are still carrying on the grand tradition. Only deaths and moves have accounted for the reduction in force.

Last Saturday the group ush-

(Continued on Page 2)

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Jan. 1 through Jan. 15.

Twenty-five-year: Dept. 15-5, H. J. Schnaubelt; Dept. 25-9, E. G. Wood.

Twenty-year: Dept. 1-17, K. S. Warren; Dept. 6, R. L. Benson, C. J. Bolin, O. C. Pasco, W. G. Ravenscroft; Dept. 14-1, Louie Nigro, R. C. Pfister; Dept. 15-4, W. J. Belliston; Dept. 31, J. S. Butina, J. S. Lawrence, M. L. Salefski; Dept. 100, H. P. Williams.

Dept. 115, C. L. Good; Dept. 129, O. W. Brotherton; Dept. 133, J. F. Koby, G. H. Wilson; Dept. 135, L. W. Sage; Dept. 160, H. B. McIntosh; Dept. 180, A. E. Bowers, G. R. Simpson; Dept. 188, W. D. Carpenter, R. C. Lamont; Dept. 197-3, C. C. Risner; Dept. 206, C. E. Schultz; Dept. 215, R. L. Weide; Dept. 266-0, R. M. East; Dept. 271, E. L. Risner; Dept. 400, E. N. Goad, Navor Sains.

Fifteen-year: Dept. 31, L. S. Jones; Dept. 95-3, Juanita G. Henry; Dept. 100-0, Dolores C. Martinez; Dept. 145, M. E. Marker; Dept. 146, R. P. Compagna; Dept. 171, A. H. Barnett; Dept. 188-1, C. W. Booker; Dept. 190-5, V. A. Petricola; Dept. 216, Minnie M. Blakeley; Dept. 280, B. T. Butler.

Ten-year: Dept. 1-41, Louise C. Derrick; Dept. 3, F. W. Burr, Jeanette B. George, S. W. Rowland Jr.; Dept. 6, R. R. Brazell, Andrew Capossere, D. F. Conklin, Fannie J. Phares, M. R. Smith, P. R. Shipps, W. H. Thiel.

Dept. 7, R. R. Gibbons, D. L. Hill, J. H. Peters; Dept. 14, R. L. Biedenbach, Effie M. Dranis, T. L. Harrison; Dept. 15, Esther B. Barksdale, H. E. Hainley, F. A. Rathmann Jr., Mildred D. Strahan; Dept. 21-1, L. S. Behm, J. E. Thompson, G. A. Young.

Dept. 25, T. A. Hall, H. E. Kessler, P. J. Mares, H. A. Means, A. V. Nelson, J. J. Sanchez, G. E. Waters, L. S. Whittley; Dept. 31, W. D. Donner, J. S. Gavett, J. R. Ortiz; Dept. 44-1, Oleta J. Anderson; Dept. 91-7, E. R. Bradley.

Dept. 101, C. M. De Anda, A. A. Ravettino, A. C. Silva; Dept. 102, Eileen M. Kresen; Dept. 110, L. W. McFarland; Dept. 115, C. Belden Jr.; Dept. 119, C. E. Foster; Dept. 120, Eileen S. Henson; Dept. 123, F. C. Magallanes, C. L. Waller.

Dept. 133, Clara F. Macias, Ona S. Martin, Virginia T. Onneland, Adeline O. Reid, C. Y. Seja, Alice L. Shelton, Helen T. Wyatt; Dept. 135, H. A. Snodgrass; Dept. 137, J. J. Cordova, C. M. Dawson, H. J. Wright; Dept. 139, Marcella B. Compton, C. F. Jones.

Dept. 142, Henry Saldano; Dept. 143, H. W. Simpson; Dept. 148, H. R. Danner; Dept. 149, B. F. Hardwick; Dept. 160, Tannie C. Craghead, J. A. Hodge; Dept. 171, N. B. Bezio, E. P. Osgood; Dept. 180-0, J. E. Owens; Dept. 188, Mary H. Armstrong, K. L. Beeman, Faith A. Hoag, L. W. Hogge, H. W. Stone.

Dept. 190-5, Sam Catalano, G. L. Hinkle; Dept. 192-5, J. R. Cervantes, Pearl F. Escalante, Wanda E. Gertzbain, C. C. Jackson; Dept. 197, Ruth S. Rawlings, Christine B. Wilson; Dept. 201, V. L. Cole; Dept. 204, Severo Ayala Jr., R. T. Scott Jr.; Dept. 215, A. K. Banirian, O. T. Ernst; Dept. 218, Frances E. Sneed, S. O. Wilson.

Dept. 223, R. M. Cooper, Anna K. Fingham, M. E. Guthery; Dept. 230, Eleanor G. Ford; Dept. 231, Louise B. Henderson; Dept. 248, J. C. Rosete.

Dept. 249, O. N. Harrison; Dept. 266, F. M. Aguirre; Dept. 267, J. D. Rebeles; Dept. 271, Catherine R. Law, T. F. Silvernail; Dept. 288, Ila B. Coleman, Clara E. Giesken, Lolita O. Gonzalez, Hettie W. Robinson, Jennie C. Thompson; Dept. 292-1, M. R. Fontenot; Dept. 401, C. A. Guthrie, H. O. Lintt, J. M. Priddy, J. D. Shepherd.

PALMDALE

Ten-year: Dept. 321-1, G. A. Swint; Dept. 325-1, V. J. Farrell.

Births

SAN DIEGO

VANDERWERF — Daughter, Sally Ann, 8 lbs., 14½ oz., born Dec. 21 to Mr. and Mrs. H. R. Vanderwerf, Dept. 115.

Deaths

SAN DIEGO

YARBROUGH — William, Dept. 99. Died Dec. 24. Survived by wife, Lottie; daughter; two sons; and a brother.

Promotions

SAN DIEGO

Promotions and transfers to or within supervision effective Dec. 19, 1960.

Dept. 6, Engineering: To chief of weapon systems integration, A. Van Duren. To electrical group engineer, J. C. Lievens.

Dept. 44-3, Material Control: To material control asst. supervisor, F. Ferguson.

Dept. 69-0, Wind Tunnels: To aero lab group engineer, E. K. Yager.

Dept. 97-6, Data Processing: To tab asst. supervisor, O. G. Downs.

Dept. 171, Field Operations: To asst. foreman, E. O. Babb, W. A. Brinkley, O. L. Huffman, H. E. Parker, L. H. Wilson.

Dept. 190-2, Applied Manufacturing Research & Process Development: To applied manufacturing research group engineer, C. A. Ives.

Dept. 192-3, Manufacturing Control, Plant 1: To M/C asst. foreman, G. A. Hillis.

Dept. 292-1, Manufacturing Control, Plant 2: To M/C asst. foreman, R. E. Smith.

Retirements

SAN DIEGO

KING—William H., Dept. 101. Seniority date Jan. 11, 1951, retirement effective Oct. 14, 1960.

OLNEY—Nathan B., Dept. 231-0. Seniority date Feb. 6, 1956, retirement effective Nov. 4, 1960.

PATTERSON—Earl D., Dept. 21-1. Seniority date March 7, 1951, retirement effective July 30, 1960.

Personals

SAN DIEGO

My heartfelt thanks and deep appreciation to my friends at Convair for the sympathy and kindness shown me at the death of my father.

Lucille Eacker, Dept. 230.

* * *

My deepest appreciation to Convair friends for the beautiful floral tributes and messages of sympathy at the loss of my mother.

Genevieve Day, Dept. 31.

Flight Time On Jet 880-M Tops 100 Hrs.

(Continued from Page 1)

Cain came to Convair SD this spring from Edwards AFB where he had been based since 1956. After several months in the SD systems dynamics test lab, he was transferred this fall to the 880-M flight test program.

F. E. Wilson and W. G. Walker, both senior instrumentation engineers, have been with the 880 flight test program since its start a couple of years ago. Walker was instrumentation engineer on plane No. 4 while Wilson served as the need arose on all three of the first 880s in flight test.

Two of the 880-Ms now on order by customer airlines are on the production line at San Diego Plant 1, one in mate and the other in primary. Deliveries are due to begin later this year to Japan Air Lines, Tokyo; Alaska Airlines; Civil Air Transport, Formosa; Avensa Airlines, Venezuela; and the Federal Aviation Agency.

Con-Trib-Club Reports Finances

Following is a statement of the financial condition of the Convair Employees Con-Trib-Club at Convair San Diego, covering the period Oct. 1, 1959 to Sept. 30, 1960.

ASSETS		
Total assets—cash in bank		$ 40,289.72
LIABILITIES AND SURPLUS FUNDS		
Account Payable—Emergency Aid Fund		$ 2,026.68
Surplus Fund:		
Balance—Sept. 30, 1959	$ 36,048.60	
Add—excess of receipts over disbursements for year ended September 30, 1960	1,788.49	
—decrease in liability to Emergency Aid Fund	425.95	38,263.04
Total liabilities and surplus funds		$ 40,289.72
Total receipts—(Oct. 1, 1959 to Sept. 30, 1960)		$308,542.17
Total disbursements		$306,753.68

(Charitable contributions: $275,385; transfers to Emergency Aid Fund, $30,568.68; accounting and audit expense: $800.)

★ Convairiety ★

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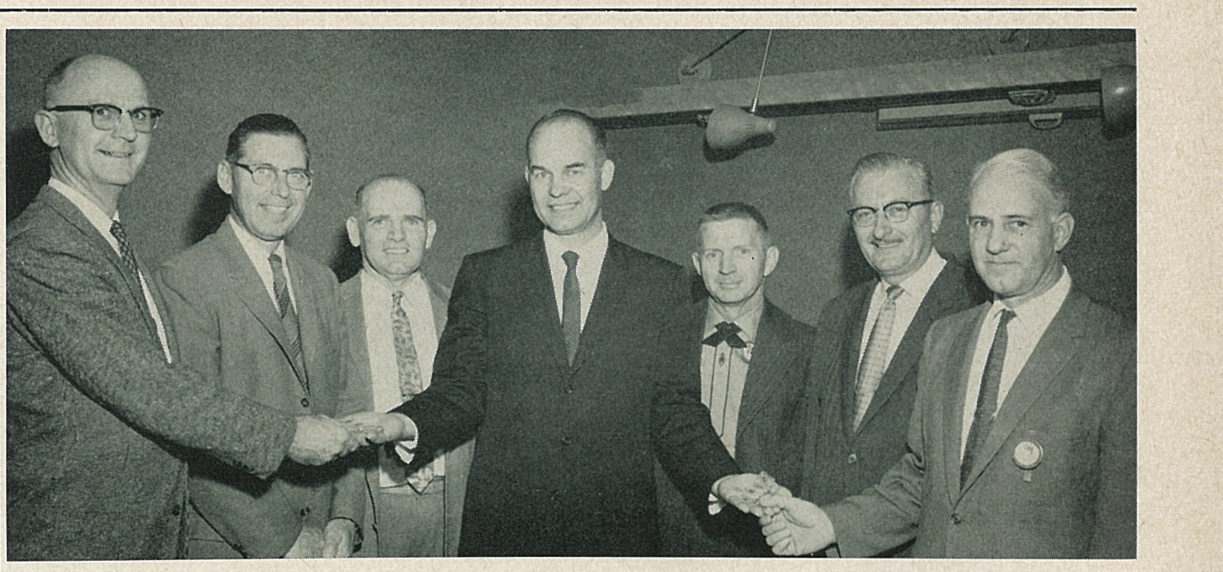
SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 8. Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

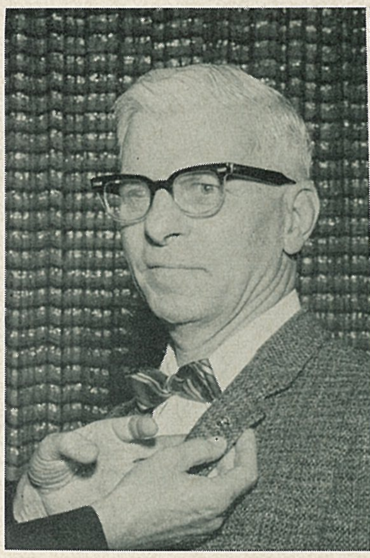
FW Editorial Offices, Col. 73C, ext. 2961. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.

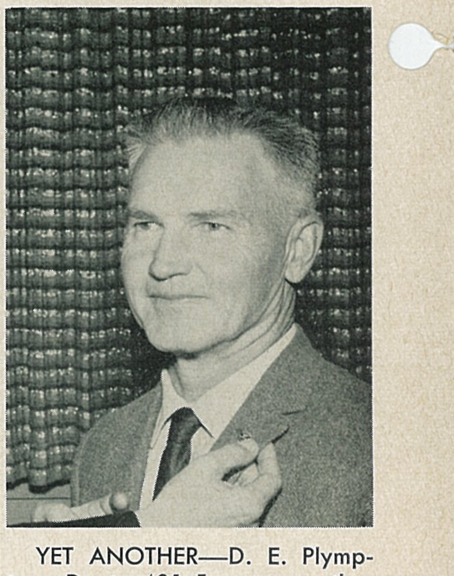


BY THE HALF DOZEN—R. C. Loomis, Convair vice president and San Diego manager, recently presented six 25-year service emblems. Reading from left, B. R. Swarts (Dept. 190-1), K. M. MacLeod (197-7), T. L. Gilchrist (218), Loomis, G. A. Dewey (31), O. P. Stockton (190-6), W. I. Miller (190-6).





LONG SERVICE—Frank E. Meer, Dept. 14 (left) and E. R. Fink, Dept. 25-1, were recognized last month for 25 years Convair service. They received customary emblems from Conrad Kunze, San Diego asst. manager.



YET ANOTHER—D. E. Plympton, Dept. 401-5, was another SD man to receive his 25-year emblem last month from San Diego manager, R. C. Loomis.

Families in Distress Helped With Dept. Gifts at Christmas

Christmas may be over but the spirit of giving is still warm in the hearts of Convair San Diego people who were able to help the less fortunate through the Yuletide.

Food, clothing, gift certificates, and cash were collected through many departments in the San Diego plant to make the holidays cheerful for families in distress.

Incomplete reports at presstime listed at least 15 families aided by Christmas collections within the plant. These were the ones handled through SD employee services. Many other groups made their own Christmas contributions to families in their own areas.

Engineering department's annual collection, totaling $148.39 this year, went to four Convair families. One has four children, the youngest seriously ill in a hospital.

Electronics people in Bldg. 51 gave $95 for Christmas dinner and necessary staples for a Convair woman with five children.

Electronics assembly and test in Bldg. 4 gathered nearly $100 and two boxes of canned goods which made the holidays brighter for two families, one with two children—the father and one boy ill; and the other with three children, the father ill and unable to work. The money was given to them in the form of gift certificates and clothing.

Dept. 8-4, systems and procedures, added $37 to $50 remaining from last year's fund for Christmas dinner, food, clothes, and toys for a Convair family with two sons and the father ill.

Contracts (Dept. 11) collected $75 for two families. A $25 grocery certificate went to one family with seven children for Christmas dinner while the balance was used for a clothing gift certificate for the four children of the other.

Data processing (Dept. 97) and guards at Plant 2 joined forces to help two families with the fathers both ill. Total collection of Dept. 97 was $315.35. The guards' collection of $40, a $125 gift certificate for clothing, and $80 worth of groceries and meat went to a family with seven children. The other family with two children received a $60 gift certificate and $50 in cash to pay utility bills.

Dept. 190-5, manufacturing planning and methods section of applied manufacturing research and process development, took its share of the former industrial engineering department's fund to help a Convair woman and her three daughters. Gift certificates for $90 of clothing, toys, and food, Christmas dinner and the group's office Christmas tree brightened the holidays for the mother and girls, 10, 12, and 14.

Three sections of quality control at Rose Canyon (Dept. 197-7, 8, 9) combined to adopt a family with seven children. They raised $41 for Christmas dinner and extra food supplies and filled a box of canned foods and clothing. Plant engineering's facilities control section (Dept. 25-5) spent its $45 to stock the pantry of the same family, besides donating more clothing and toys for the children.

Salvage yard at Convair SD Plant 1 (Dept. 14-5) collected a box of canned goods for a Convair family with 8 children. Turkey for Christmas dinner was purchased with $15 from the engineering and electronics donations.

Convair Alumni Renew Pledge For 25 Years

(Continued from Page 1)

ered in the new year at the home of Mr. and Mrs. Benny Kiegle. And for the 25th time, at the stroke of 12, they renewed their pledge to meet again.

In addition to the Kiegles, remaining members of the group include Mr. and Mrs. Arnie Springer, Mr. and Mrs. Wesley Schlagenhauf, Mr. and Mrs. William Milton, Mr. and Mrs. Charles Brady, Mr. and Mrs. Al Bossert, Mr. and Mrs. Welton Stone, Mr. and Mrs. Leo Klingenmeier and Mrs. Clara Patton.

All of the men are retired with the exception of Springer and Schlagenhauf.

Northeast Debut For 880s Held In Snow, Ice

(Continued from Page 1)

other jet transports.

"Start of 880 service with Northeast went off extremely well," said Bordelon, "especially in view of the short preparation time allowed."

Before the red-letter day, the first 880 to be groomed for service made actual flights on schedule as pre-proving runs. It made one round trip a day for six days over the Boston-Philadelphia-Miami run. Bordelon and R. L. Runnalls of SD airline performance engineering went along on the official proving run which ended in FAA certification as a passenger ship the day before the 880's start in service.

Other Convair SD men on hand at Boston for the inauguration were Walt Belliston, senior field service representative for Northeast; Ed Buckman, field service rep; Vic Korski, on special assignment for service engineering. Don Seaburg and Jack Sanders of SD inspection were at the Massachusetts airport assisting the Convair field service team in support of start of 880 service. R. B. Carothers of SD commercial contracts also made the trip to Boston with Bordelon and Runnalls on the third delivery flight —notable for its speedy time of 4 hrs. and 10 min.

Greeting the first Northeast 880 as it touched down at Philadelphia on opening day were Glen Arner and John Nowak, SD field service reps there. Robert Fitzgerald, SD rep at Miami, joined ceremonies at the Florida end of the line.

Two 880s are now making two round trips each day from Boston to Miami. Load factors on the trip south are particularly high. Except for one full day and part of another when all scheduled airliners out of Boston were grounded because of heavy snows, the 880s have been flying the route regularly. All of the 880s now with Northeast are either in operation or in use for pilot training.

Scholarship Program Of Dynamics to Include Girls as Well as Boys

A new undergraduate scholarship program for all divisions of General Dynamics Corporation will supplant the annual Convair Sons' Scholarships given the last five years to top-standing sons of Convair employees at each operating division.

General Dynamics has increased its participation under the National Merit Scholarship Corporation to provide 12 awards to be apportioned among its divisions. Of these, Convair will receive six.

J. L. Budros, assistant to Convair vice president-administration, who will administer Convair's participation in the new program, explained the expansion of General Dynamics Merit Scholarships to include all divisions. "The scholarship system as regulated by the National Merit Scholarship Corporation is more flexible and equable than any which can be conducted by individual organizations. It also has the advantage of being adjusted to meet each individual's particular needs and circumstances."

The General Dynamics Merit Scholarships, as they will be known, will be open to both boys and girls of employees who have been with the company two consecutive years without broken service. Children of retired or deceased employees are eligible.

Awards may be used toward general collegiate study in any field. (Formerly, Convair scholarships were restricted to top boy scholars for use toward degrees in engineering or an allied science only.)

Amount of scholarships range from $250 to a maximum of $6,000 apportioned over four years of college work. Each stipend is determined by family financial circumstances; how much can be provided for the student's higher education by the parents or the student himself; and the cost of attending the college or university of the winner's choice.

Second part of the two-fold scholarships are grants by General Dynamics to schools chosen by its scholarship winners to make up the difference between cost of tuition and actual expense of the schools.

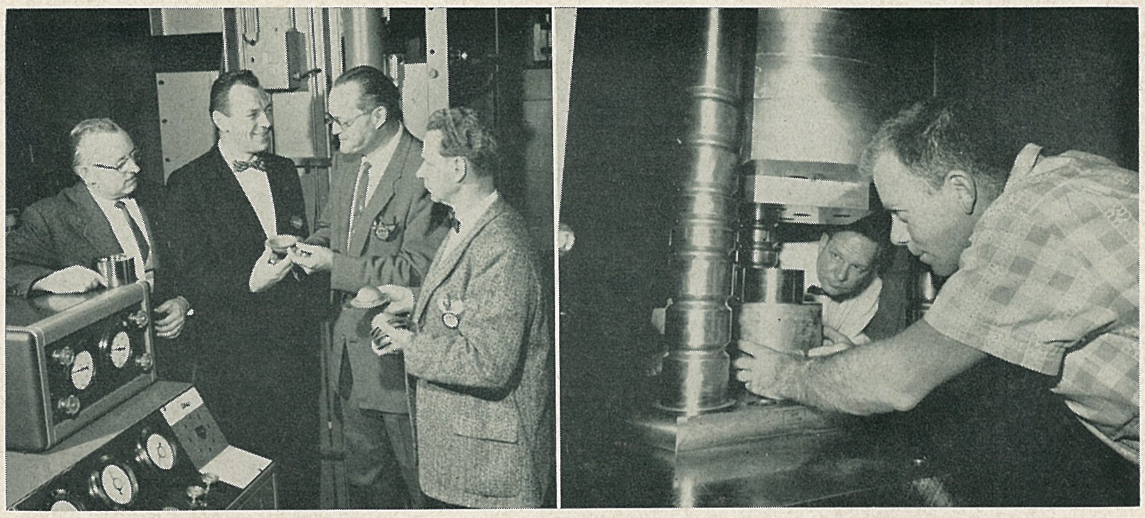
Only students who will graduate from high school in 1961 and enter college during 1961 are eligible for the current year's awards. All high school students who have already taken National Merit Scholarship qualifying tests, usually given during the second semester of the junior year, are automatically eligible for this year's scholarships. The tests are made available through all high schools, usually in March of each year. These scores will be used to evaluate candidacy of General Dynamics Merit Scholarship applicants.

For this year only, said Budros, special provisions will be made for outstanding Convair students who have not taken the NMS qualifying tests. Records submitted by parents to the proper administrator in each Convair operating division will be reviewed and considered for eligibility for 1961 awards. They must be turned in by the deadline date of Jan. 25. Winners will be announced in May.

Looking ahead to next year, Budros encourages Convair sons and daughters who will be graduating from high school in 1962 to make arrangements with their high school principals to apply for the scholarships and qualifying tests during the fall semester of their junior year.

Further information may be obtained from the following locations at each Convair operating division: Convair San Diego—M. M. Saunders Jr., SD educational services, ext. 1827, Plant 1; at Convair Astronautics—E. W. Thurston, Astro educational services, ext. 2039, Astro main plant; at Convair Pomona—K. G. Beyer, chief of educational services, ext. 3209, Pomona plant; at Convair Fort Worth—J. B. Ellis, industrial relations administration-engineering, ext. 3551, FW plant; at Convair Daingerfield—N. H. Moore, manager of industrial relations, ext. 424 or 381.

Convair people based at offsite locations may contact their industrial relations representatives for details.



BREAK-THROUGH—In left hand photo, left to right, are T. E. Kerr, asst. foreman; R. G. German, test support foreman; T. A. Herbert, metallics group asst. supervisor; and D. G. DeVlieg, project engineer, handling first dynamically formed hemisphere at Astronautics. At right, DeVlieg watches as E. L. Christian, technician, sets die underneath Dynapak ram.

Frank Davis Makes 1935 'All America'

Frank W. Davis and 24 other prominent leaders in their fields have been named to the "Sports Illustrated" silver anniversary All-America team.

The team is composed of men who earned varsity football letters as seniors in 1935 and who have "acquitted themselves in careers and public service with outstanding distinction" during the past 25 years.

Davis and his distinguished teammates will each receive an award—symbolic silver goal posts—at an appropriate ceremony in the near future.

More than 200 leading colleges and universities nominated one senior from their 1935 team for a spot on the squad. In each case, the nominee was the one who had shown "most accomplishment in his field" since graduation.

Davis was selected by California Institute of Technology, where he captained the 1935 varsity and was an outstanding all-around athlete.

The team includes a college president, a self-made millionaire, an orthopedic surgeon, a stockbroker and a brigadier general in the U.S. Marine Corps.

New Forming Technique Uses Convair Dynapak

A new technique which uses two glasses of tap water to form precision missile parts has been developed by Convair Astronautics' applied manufacturing research and process development (Dept. 290-2).

The process makes use of the Dynapak Model 1200, a forming machine produced by Convair's Dynapak facility. (The facility has been located in Pomona, Calif., but is in process of a move to San Diego.)

Although Model 1200s are presently in use throughout the country for a variety of manufacturing processes including forging and extrusion, Astro's method is regarded as a major break-through in the field of high energy rate forming.

In its first production application at Astro, the new "dynamic forming" method produces precision steel hemispheres for a special engineering test tank.

Dynapak consists of a power supply and control unit which regulates operation of a one-ton ram, shock-mounted in a heavy frame.

Nitrogen gas at pressures ranging as high as 2,000 pounds per square inch is led into a chamber behind the ram, and the ram is lifted hydraulically a dozen inches above the machine's "bolster" (work surface).

When released, the ram crashes down with the velocity of a high-powered rifle bullet, delivering up to 150,000 foot-pounds of impact.

Tooling for the special Astro procedure consists of a steel cylinder 12 inches in diameter, and eight inches high (the die pot). Into this, a chamber six inches across and six inches deep has been bored. The die pot is placed on the Dynapak bolster and the chamber is filled with about a pint of water.

The die, a smaller cylinder which fits inside the die pot chamber much as a piston fits into its cylinder, has been hollowed out on the lower face to the shape of the part to be formed: in this case, a hemisphere three inches in diameter.

The die is coated with a lubricant which also prevents water seepage, and a five-inch disk of 3/32-inch stainless steel (the blank) is laid across the concavity. Then the die is slipped into the die pot until it "floats" on the water inside the chamber.

When the Dynapak ram slams down on the die, water trapped in the die pot forces the blank upward until it conforms exactly to the shape of the die, instantaneously producing a finished hemisphere.

Experiments are in progress to explore the use of the new technique with various thicknesses of steel, aluminum and new metal alloys. A method in which liquid nitrogen replaces the water for use under cryogenic (super-cold) conditions is also being studied.

T. E. Kerr is assistant foreman in charge of the applied manufacturing research laboratory, and T. A. Herbert is metallics group assistant supervisor. Development of the new process is credited to D. G. DeVlieg, project engineer, and E. L. Christian, technician.

TCU Registration Slated For Jan. 12

Registration for TCU spring semester courses to be held at Convair FW will be held from 2 to 6 p.m. Jan. 12. Classes start the week of Feb. 6.

A total of 22 management and technical courses will be offered. Officials from TCU will be available for counsel and registration on Jan. 12 only.

For further information, contact Jess Butts of educational services (ext. 3442).

Eight-Page Issue To Resume Jan. 18

Because year-end holidays cut deeply into production time, today's **Convairiety** is in six pages.

The regular eight-page edition will be resumed Jan. 18 and continue. Such regular features as the running Convair history also will be resumed then.

'Snoopy' Home For Christmas, Will Get Speed Modification

Hustler No. 6—"Snoopy"—is returning home for three months of design speed modifications.

On loan to Hughes Aircraft, the Hustler has been flight testing that company's ASG-18/GAR-9 missile fire control system at Edwards AFB for the past 15 months. (The "Snoopy" designation comes from its distinctive long nose, due to special radome.)

The Hustler will be modified by development department, then returned to Edwards AFB for supersonic launches of the air-to-air missile system.

The missile system was originally earmarked for the Mach 3 F-108, which has since been cancelled.

"However, it still appears to be a good tactical system," said Assistant Project Engineer W. A. Bratton, "and Hughes is testing it out in conjunction with the armament section of Wright Air Development Center."

Col. J. M. McPhie is head of the armament section.

Flying "Snoopy" into Fort Worth was a Hughes crew of Dr. Ollie Deal, John Archer and Jess Le Van.

James Craft of Hughes has been assigned resident engineer at Convair FW for duration of the modification work.



HUSTLING HOME—Hughes Aircraft crew of, from left: Jess LeVan, John Archer and Dr. Ollie Deal turn over Hustler No. 6 to Convair's W. A. Bratton following flight from Edwards AFB.

Slide Show Slated For Camera Club

Convair Pomona Camera Club members will travel to the old south, via color slides, when they meet at 7:30 p.m. Thursday, Jan. 12, at the CRA Clubhouse, Paul Jackson, commissioner, announced.

The taped commentary, entitled "Mansions, Magnolias and Memories," was prepared by Kodak photographer Don Nibbelink. Hints and suggestions on flash photography, time exposures, available light shooting and the ability of telling a story with vacation pictures will be featured in the illustrated program. All employees and their families are invited.

Funeral Conducted For C. D. Applin

Funeral service for Charles D. Applin, Dept. 51 at Convair Pomona, was conducted Dec. 28 at Todd Memorial Chapel in Pomona.

Applin was a native of Massachusetts and had been employed at Convair as a turret lathe operator since September, 1954. He is survived by his wife, Francis M. Applin, three sons, Charles, Harold and David, and three daughters, Beverly, Marilyn and Carolyn.

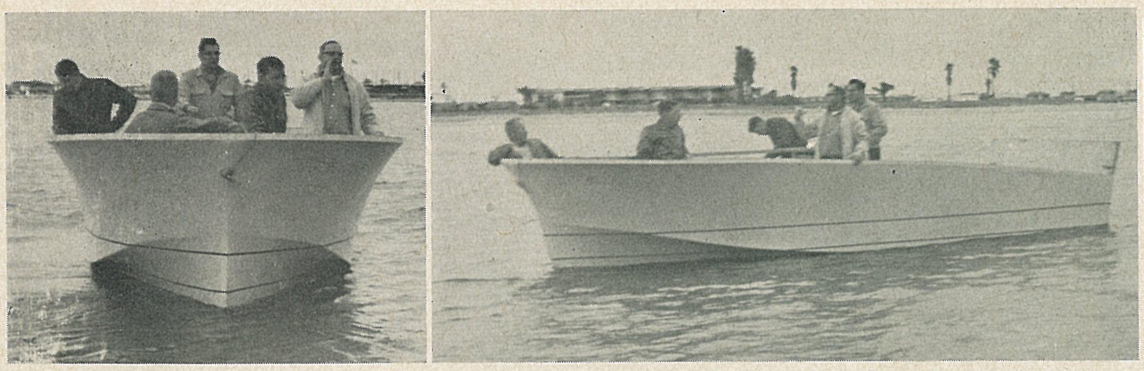
Moon Exploration Discussion Topic

James D. Burke, director of Project Ranger, will discuss "Exploration of the Moon," at the Institute of Radio Engineers Group on Space Electronics and Telemetry meeting in San Diego tonight (Jan. 4) at 7:30 p.m.

Meeting place is the Kings Inn, Mission Valley.



HOLLOMAN SNOWFALL—Seven-inch snowfall recently covered Convair facility at Holloman AFB, New Mexico. O. J. Ancel wrote "it gave us all at this desert outpost an environment conducive to good Christmas cheer."



TEST TIME—First experimental runs of Convair SD Recreation Association's 25-ft. boat were conducted early last month in Mission Bay. Tests were termed "completely successful" by Warren Hoyt, test engineer of the boat program. Eventually, interested Convair SD men will be offered chance to build similar boat at Gillespie Field facility through CRA arrangements.

Seven Members of Family Work At Convair SD, Three Generations

When Ida Benson (Dept. 101 SD) gets her family together for a holiday it's almost an impossibility to keep Convair out of the conversation.

No less than seven members of the family, representing three generations, work at Convair in San Diego. Together they can claim 67 years with the company, a total which would probably be nearer 80 if interrupted years were counted in.

Theoretically they could almost start a company of their own because their jobs run a gamut from raw material to finished product.

In their number is a buyer to purchase material, a design specialist to come up with a product, a filer to keep the blueprints in order, a secretary, and production personnel to keep the assembly line rolling.

The three generations employed at Convair SD are Ida Benson, who will retire next year at age 65, her daughter, Pauline Nebeker (Dept. 6-21), and granddaughter, Georgine Griffin (Dept. 34).

Then there is G. H. Nebeker, Dept. 34-2 (Pauline's husband); E. E. Benson Jr., Dept. 6 (Mrs. Benson's son); Elaine Marshall, Dept. 4 (another daughter of Mrs. Benson), and her husband, William Marshall (Dept. 771-0 Astro).

According to present anniversary dates, E. E. Benson Jr. can claim the service total record with 19 years, followed by William Marshall with 14, Mrs. Benson with 10, Mr. and Mrs. Nebeker, both 8, Mrs. Marshall with 7, and Georgine Griffin with 1.

Former Deputy AFPR At Convair Recalled

A Christmas card to R. B. Watts, Convair vice president and general counsel, from Mrs. Shirley Ohmer, Box 133, Camp Verde, Ariz., included this sentence: "Please give our best wishes for a happy New Year to Horace's friends at Convair."

Horace Ohmer was Deputy Air Force Plant Representative at San Diego for many years prior to his death in December, 1959.

50 SD Women Invited To Take Charm Course

Convair San Diego women will be starting the New Year right as they sign for a new beginning charm course due to start this month.

Registration opens tomorrow (Jan. 5) at SD employee services, Plant 1, for the six-week course, one of the series sponsored for all Convair SD women, wives and daughters by CRA, announced Martha Woodberry, CRA commissioner of women's activities.

First session will be held Jan. 25 and each Wednesday at 7 p.m. in the executive dining room of the new Convair cafeteria on Pacific Highway. As usual, Edith Antelline, well-known San Diego charm school director and fashion commentator, will instruct the self-improvement classes.

Each of the two-hour sessions will deal with specific facets which combine to improve appearance, said Mrs. Woodberry. Especially stressed are good grooming, diet and nutrition, figure analysis, posture, business and social etiquette, hair styling, make-up, basic wardrobe.

Cost of the course, a fraction of its value if taken individually, is $8.50 for the entire six weeks, explained Mrs. Woodberry, who emphasized that payment must be made at time of registration. Classes are limited to 50 women on a first-come, first-served basis.

John Stahl Named Society Director

VANDENBERG AFB — John Stahl, Astronautics chief of site engineering here, has been installed as a director of the Central California chapter, American Rocket Society.



GETTING READY — Members of committee planning Antelope Valley Convair Wives Club fete are shown in action prior to Dec. 13 affair. From left they are, Marjorie Gore, Mary Ann Dobyns, Ella Hansen and Iva Jean Dunn.

Radio Club to Conduct Class In Code, Operating Procedure

Plans for a new code and operating procedure class were announced by Convair SD Radio Club last week.

Scheduled to start about Feb. 1, the class will be conducted by club members. It is primarily intended to prepare beginners for novice class examinations, but should also be useful for others studying for general class tests.

Registrations will be accepted at a Radio Club meeting tomorrow (Jan. 5) which will be held at 7:30 p.m. at the Harbor Drive headquarters.

In the past, meeting dates and times for club-sponsored classes have been arranged to suit the convenience of a majority of the students. Club records show that more than 70 per cent of the students have been awarded licenses.

All Convair SD employees and members of their families are eligible to take the course. For additional information, call Jim Lack, ext. 2958, Plant 1.

European Trip Brochures Are Now Available

A limited number of brochures which explain in detail the next CRA-sponsored trip to Europe are now available at Convair SD employee services office in Bldg. 32, Plant 1.

The trip and tour is open to all Convair SD persons (and members of their families) who are eligible for at least two weeks vacation and have their supervisor's approval to take the vacation during the specified dates.

Scheduled to leave Los Angeles for Copenhagen April 8, the prorated, round-trip flight cost will be $375. Return, via a Scandanavian Airlines System DC-8C over the jet polar route, will be April 22 from Copenhagen.

Also offered is a "European Holiday" tour which will visit London, Paris, Lucerne, Luxembourg, Brussels, Amsterdam. Package price for tour and flight is $685.

Flight price alone is based on a 100 per cent utilization of 132-seat plane; tour and flight cost is based on a minimum of 30 participants.

Fifty-dollar deposits will be accepted through Jan. 16 with the balance due by Feb. 15.

Tom McAleer Joins Astro

Thomas F. McAleer, veteran Convair executive, has joined Convair Astronautics as assistant to the manager of operations. Prior to his transfer, McAleer was chief of manufacturing control at Convair San Diego.

In the newly-created post McAleer will assist operations department administration in areas of manufacturing work on Atlas, Centaur and other Astro projects, as well as tooling, plant maintenance and manufacturing research, according to Elwood D. Bryant, operations manager.

McAleer joined Convair in 1942 as general foreman of the welding department.

SD Junior College Offers Wide Range Of Spring Classes

A number of selected training courses to be offered at San Diego Junior College during the spring semester are of special interest to many Convair people.

Technical subjects to be taught include drafting, industrial inspection, electronics, industrial technology, supervision, tool design, tool planning, aircraft, technical illustration and others.

These classes afford Convair employees an excellent opportunity to keep abreast of the latest advances in the aircraft and missile industry, said H. W. Rubottom, chief of educational services.

Registrations will be taken from the present time until classes start the week of Jan. 30. The spring semester ends approximately June 15.

Complete information concerning courses, schedules and costs is available by calling Lee Woll, coordinator, ext. 491, Plant 1; or educational services offices at Plants 1 and 2, and Rose Canyon.

AF's Sunny Cooper Will Be Installed As Head of Deltas

Sunny Cooper of the AF office at San Diego will be installed as president of the Delta Toastmistress Club next Tuesday (Jan. 10) at a 7.30 p.m. dinner and installation ceremony in the Georgian Room of the Grant Hotel.

Other officers to be installed are Pam Gray (wife of W. A. Gray, Astro Dept. 781), vice president; Helen Fenton, secretary; Catherine Whelan, treasurer; Louise Klein (wife of Kurt Klein, SD Dept. 231), club representative.

Installing officer will be Martha Woodberry, SD Dept. 3-2, charter member of the Delta Club and present secretary of Toastmistress Inc., Council #7.

Reservations may be made through Marge West, SD Dept. 6, ext. 2993.

Antelope Valley Wives Observe Holiday With Lunch Gathering

ANTELOPE VALLEY—Members of Antelope Valley Convair Wives Club observed their annual Christmas meeting Dec. 13 when they gathered for luncheon at the Banquet Room of the Sands Hotel.

Mrs. Marjorie Gore headed the group planning the luncheon. She was assisted by Mrs. Mary Ann Dobyns, Mrs. Ella Hansen, Mrs. Joyce Bowman and Mrs. Iva Jean Dunn. Decorations followed the holiday theme.

Table centerpieces were won by Mrs. Ruth Bickhart, Mrs. Ruth Maloy, Mrs. Lil Baxter, Mrs. Jean Thompson and Mrs. Marianne Kurtzman. Door prizes went to Mrs. Iva Jean Dunn and Mrs. Leah Pearson.

Next regular meeting will be at the home of Mrs. Gore, 43737 N. Fern Ave., Lancaster, on Jan. 10. Participants who have addressed envelopes for the Crippled Children's Society are asked to bring them to the meeting.



YOUTH HONORED—Diana MacPherson, center, holds trophy as she is honored as first "Youth of the Month" by Antelope Valley Convair Wives Club. At left is Mrs. Marianne Kurtzman, president, while Mrs. John C. MacPherson, Diana's mother, stands at right.

Volunteers Needed For SD Golf Open

Volunteers to help as marshals during the annual San Diego Open Golf Tournament slated for Jan. 12-15 are being sought among Convair San Diego and Astronautics employees.

This year the event benefits the San Diego junior golf program.

Help is needed in handling crowds on all days, but particularly on Saturday and Sunday. Marshals are given certain concessions, including free admission to the entire tournament. Those caring to help one or more days may contact Tom Wills at ext. 3373 at Astronautics.

L. D. Frisbee, Former Accountant, Is Dead

L. D. Frisbee, CRA accountant at Convair SD until his retirement in May, died early Dec. 26 in Scripps Memorial Hospital.

Private graveside services were held last Friday at Fort Rosecrans National Cemetery.

A native of Sheldon, Iowa, Frisbee joined Convair in 1942. He was in property accounting until he transferred to CRA accounting and purchasing in 1956. He had served in World War I as second lieutenant in the army.

Survivors include his wife, Elta, at the home address, 430 Westbourne St., La Jolla; and a brother, Willis, also of La Jolla.

Lompoc Press Club Elects Convair Man

VANDENBERG AFB — Emile Genest, Convair communication representative here, has been named president of the newly-formed Lompoc Press Club.

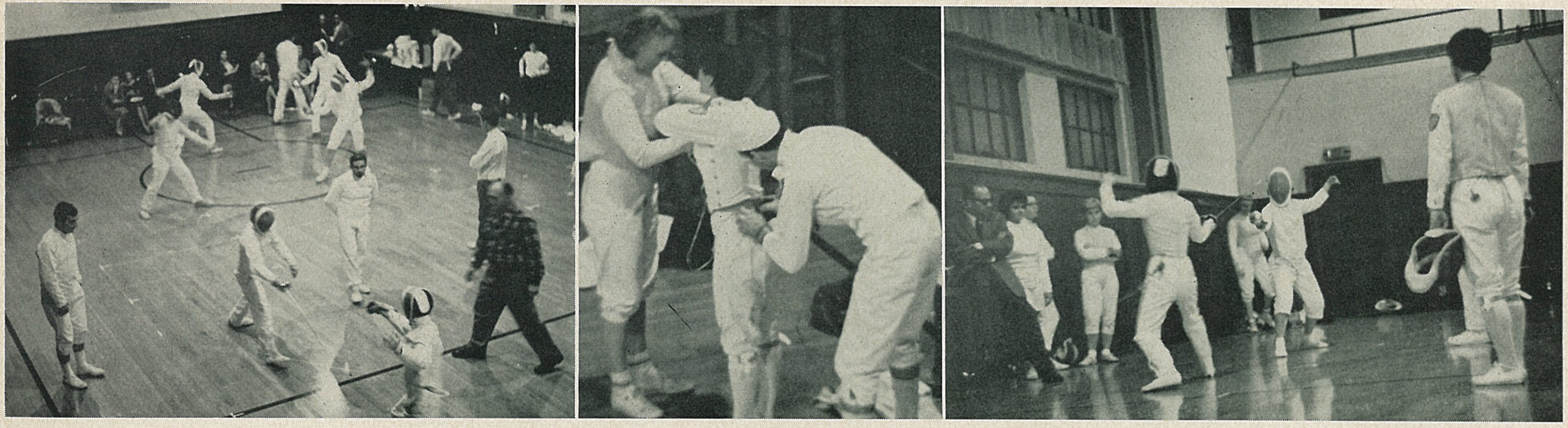
The organization now has more than 60 members, including local radio and newspaper journalists, military public relations officers, representatives of missile contractors and civic leaders.

Antelope Valley Convair Wives Club Honors Senior With 'Award of Month'

ANTELOPE VALLEY—Diana MacPherson, a senior at Antelope Valley high school, has received the first "Youth of the Month" award presented by the Antelope Valley Convair Wives Club.

Mrs. Marianne Kurtzman, president, made the presentation as part of a Dec. 13 meeting.

Diana was the first Antelope Valley youth to participate in the Foreign Student Exchange program. She gave details of her European trip to Germany as part of the program. Diana maintains an "A" average in all scholastic courses in school. She is the daughter of Mr. and Mrs. John C. MacPherson of Lancaster.



POINTED CONTEST—Photograph at left gives overall view of first San Diego Invitational Fencing Tournament hosted recently by joint Convair Astro and SD Fencing Club. At center, Maxine Mitchell, Olympic fencer from Burbank, Calif., and Mike Hurley, CRA commissioner, assist Astro daughter Barbara Proppe to don body cord for electric scoring. At right, Barbara waits her turn to fence while fencers from Pomona College and Burbank Fencing Club spar.

Ground School Class Resumes

There is room for eight or ten additional students in a CRA-sponsored ground school course now being held every Wednesday evening at Jim's Air Service, Lindbergh Field.

Open to all Convair SD people and family members interested in obtaining their private or commercial pilot's licenses, the classes are held between 7:30 and 9:30 p.m.

The present course is more comprehensive in scope than those held in the past and includes instrument flying which is now required by the FAA as part of the final exam.

Those interested are invited to attend the class tonight, or call Rex Robinson, instructor, ext. 2271, Plant 1. Students presently enrolled are reminded that the subject matter presented at the Dec. 21 class will be repeated at tonight's session.

Coineers Set New Membership Mark

Convair SD Coin Club is looking forward to another "growth" year in 1961 after setting an all-time high membership mark during the past 12 months.

New officers who will be guiding club activities were elected at a meeting Dec. 20. They are Al Baber, president; Norm Neault, vice president; Steve Ames, secretary; and Frank White, treasurer.

With the present membership standing at 52 the club hopes to expand further in 1961. All collectors are invited to join the group and take part in its many activities.

Meetings are held the third Tuesday of each month at the Hearing Aid Society Bldg., 3843 Herbert St. The club regularly schedules guest speakers, conducts coin auctions and sponsors trips to coin dealers.

Winner of the drawing for the Christmas ham at the December meeting was Vince Bacon (Dept. 6).

Sports Car Club Meeting Tonight

Convair SD Sports Car Club will hold its next meeting tonight (Jan. 4) at 7:30 p.m. in the Natural History Museum, Balboa Park.

Peter Aperlo, publicity chairman, said movies and slides of the recent CRA-sponsored trip to Europe will be shown.

CRA Sports & Recreation Convairiety

Hunter Safety Registration Will Open Saturday, Jan. 7

A new series of CRA-sponsored hunter safety classes will start this coming Saturday (Jan. 7) at 9 a.m. at the Gillespie Field Clubhouse, El Cajon.

This meeting has been scheduled for class registration only, said Arnold Schrock, certified NRA instructor, who stressed that everyone who intends to take the training must be at the Jan. 7 session.

The course, open to anyone over 10 years of age to comply with the California state law for instruction for young people under 16 years before they can receive hunting licenses, will run for three consecutive Saturday mornings. Instruction is given in both .22 rifle and shotgun handling.

Students are asked to use their own guns, if at all possible, although a limited number of club rifles are available. Only charge is a 50-cent fee for instruction book, ammunition, and brassard.

Schrock said that hunter safety courses will continue consecutively until all Convair SD and Astro young people interested receive the training.

CRA Fencers Sponsor Meet

Thirty fencers representing five clubs from throughout Southern California participated in an invitational fencing meet sponsored recently by SD-Astro CRA at the downtown YWCA.

Participating were Burbank Fencers, A'guillas, Pomona College, San Diego (YWCA) Fencers, and the host Convair club.

Prominent fencers taking part included Maxine Mitchell, U. S. Olympic Fencing Team member, representing the Burbank group, and Dr. Zold, well-known Hungarian fencing master.

The Olympic star won the women's foil event, while men's foil honors went to Capt. Hart Kait, USN, of the San Diego (YWCA) Fencers. Events scheduled for epee and sabre were not completed due to lack of time.

SD Baseball Squad Leading City Play

Convair San Diego's baseball entry in the American League has spurted into first place in the second round with two wins and no losses.

By the same score of 9-4, the Convair nine dropped Westgate Tuna and Brawley, with pitcher Bill Murphy going the route in both games.

Top batsmen for the Convair squad include Bobby Steel, Johnny Hartsell and Dick Fenton. The next game will be played this Sunday (Jan. 8) when the SD team meets Astronautics at 1 p.m. at Mission Bay Youth Field. Spectators are invited.

Young Astronomers Schedule Meetings To Hear Specialists

Two January meetings are included on the first quarter schedule of Astro CRA Youth Astronomy Club.

First is slated Jan. 6 in the executive dining room, with adoption of club bylaws on the agenda. H. L. Weisbood of San Diego City-County Schools will discuss the science fair program.

On Jan. 20, the group will meet at Marston Junior High School to hear Dr. James Crooks discuss gravitational forces.

Top Keg Tourney Dates Established

Tentative dates for the 1961 Convair San Diego Championship Bowling Tournament were revealed last week by Jim Hayman, CRA co-commissioner of bowling.

Unless unexpected scheduling difficulties arise, the tourney will be held on the weekends of March 17-18, 24-25 and 31-April 1. Entry blanks will be available soon for the tourney, which is traditionally Convair SD's most popular keg event.

CRA Calendar

(In view of the fact that Convairiety now carries the complete CRA calendar only at intervals, it is suggested that readers may desire to clip for future reference.)

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AEROMODELERS — Vic Korski, commissioner, ext. 2250, Plant 1. For information call Gary Witt, ext. 1508, Plant 1. Competition usually first Sunday of month, 8:30 a.m., Clairemont-Mesa field.

ARCHERY—Gil Crosthwaite, commismissioner, ext. 426 (second shift), Plant 1. Club meets third Thursday, 7:30 p.m., CRA Clubhouse, Pacific Hwy. Workshop in clubhouse open each Tuesday and Thursday, 7-9 p.m. Monthly shoots on second Sunday of each month.

ASTRONOMY—Keith Sears, commissioner, ext. 2900, Plant 1. Club meets first and third Fridays, 8 p.m. at CRA Recreation Area, Gillespie Field, El Cajon.

BADMINTON—Call CRA office, ext. 1245, Plant 1, for information. Organized play and instruction Tuesdays, 7:30 p.m., Federal Bldg., Balboa Park. Open play for Convair employees and their families each day.

BALLROOM DANCING — Martha Woodberry, commissioner. Call ext. 1245, Plant 1, for information. Grace McGrath Studio, 8241 La Mesa Blvd, HO-3-7545.

BASEBALL—Pete Beyrer, commissioner, ext. 1245, Plant 1.

BASKETBALL—Gil Crosthwaite, commissioner, ext. 426 (second shift), Plant 1.

BOWLING—Jim Hayman, ext. 1155, Plant 1; Mike Brooks, HO-9-8793, commissioners.

BRIDGE CLUB—Pete Beyrer, commissioner, ext. 1245, Plant 1. For information call Frank Westphal, ext. 2225, Plant 1. Meetings first and third Tuesday, 7:30 p.m., at Hotel Barcelona, 326 Juniper St.

CAMERA CLUB—C. E. Schultz, commissioner, ext. 289, Plant 2. Regular meetings second and fourth Mondays, 7:30 p.m., Photo Arts Bldg., Spanish Village, Balboa Park. Darkroom in CRA Clubhouse available to club members.

CHESS CLUB—Gil Crosthwaite, commissioner, ext. 426 (second shift), Plant 1. Club meets each Wednesday, 7:30 p.m., CRA Clubhouse. Sets available for lunch period games.

CHORAL CLUB—Martha Woodberry, commissioner, ext. 1245, Plant 1. W. A. Vogel, director. Rehearsals each Monday, 7:30 p.m., CRA Clubhouse.

COIN CLUB — Gil Crosthwaite, commissioner, ext. 426 (second shift), Plant 1.

DELTA DIVERS — Gil Crosthwaite, commissioner, ext. 426 (second shift), Plant 1. Meet fourth Tuesday of each month, 7:30 p.m., Conference Bldg., Balboa Park.

FENCING CLUB—Workouts and instruction each Friday night, 7-10 p.m., YWCA, 10th and C Sts. For information, call Pete Beyrer, ext. 1245, Plant 1.

FISHING—R. W. Menzie, commissioner, ext. 1181, Plant 1. Club meets third Tuesday of each month, 7:30 p.m., Gillespie Field Clubhouse.

GARDEN CLUB—E. L. Zimmerman, commissioner, ext. 1761, Plant 1. Club meets second Wednesday of each month 7:30 p.m. Floral Assoc. Bldg., Balboa Park.

GLIDER CLUB—Vic Korski, commissioner, ext. 225, Plant 1. For information, call Ted Sanford, ext. 1267, Plant 1.

GOLF—Ken Wulfemeyer, commissioner, ext. 1705, Plant 1.

GUN CLUB—Jack Swank, ext. 1161, Plant 1; Gene Horstman, ext. 405, Plant 1, second shift, commissioners. Club meets second Tuesday of each month, 7 p.m., Gillespie Field Clubhouse. Club shoot, rifle, trap and skeet, first Sunday of each month at CRA range overlooking Gillespie Field, El Cajon. Open shooting each Sunday.

ICE SKATING — Martha Woodberry, commissioner, ext. 1245, Plant 1. Skating sessions for Convair employees and their families each Thursday at Iceland, 6055 Lake Murray Blvd. Special Convair rates between 6:30 and 8 p.m.

IN-PLANT ACTIVITIES — Equipment available for horseshoes, washer pitching, shuffleboard, chess, checkers, also cards for bridge, pinochle, ect. Contact CRA headquarters, ext. 1245, Plant 1, or department CRA representatives.

JUDO — Pete Beyrer, commissioner, ext. 1245, Plant 1. Instruction each Thursday at 7 p.m. in CRA Clubhouse on Pacific Hwy.

MODEL RAILROAD — Pete Beyrer, commissioner, ext. 1245, Plant 1. Meeting each Friday at 7:30 p.m., House of Charm, Balboa Park.

MOVIES — Reduced-price movies each Friday, Saturday, and Sunday night at Adams Theater, 3325 Adams Ave. Adults, 50c; children under 12 free if accompanied by adult.

PISTOL CLUB—Ash Bishop, commissioner, ext. 1761, Plant 1. Home phone, HU-8-3460. Club shoots second and fourth Sundays of each month at 9 a.m. San Diego Police Pistol Range, Federal Blvd. and Home Ave.

RADIO CLUB—Club meets Thursday after issue of **Convairiety**, 7 p.m. at Radio Club Headquarters, Harbor Drive. For information, call Jim Lack, ext. 2958, Plant 1.

RIDING CLUB—Marc Beresford, commissioner, ext. 1777, Plant 1. C. L. Pogorel, co-commissioner, ext. 1740, Plant 1.

ROCKHOUNDS — Dan Whorton, commissioner, ext. 426, Plant 1. Lapidary classes Tuesdays and Wednesdays, 7-9 p.m., Rockhound Shanty. Classes for second shift, Tuesday, 12:30-2:30 p.m. Regular meetings second Thursday of each month, 7:30 p.m., Gillespie Field CRA Clubhouse.

ROLLER SKATING — Convair skate night, third Monday each month. Free tickets at employee services offices. Saturday matinees each week, 2-4:30 p.m., Skateland, Front and G. Admission 25c per person for Convair employees and their families. Admittance by club membership card. Cards available at employee services, both plants.

SKI CLUB—Joe Harris, commissioner, ext. 1845 or 2958, Plant 1.

SOFTBALL — Tony Berardini, ext. 2910, Plant 1: Gil Crosthwaite, ext. 426 (second shift), Plant 1, commissioners.

SOLO FLYERS—Vic Korski, commissioner, ext. 2250, Plant 1. For ground school information contact Rex Robinson, ext. 1636, Plant 1. For commercial ground school call Bert Shields, ext. 2788, Plant 1.

SPECIAL EVENTS and COMMISSIONERS-AT-LARGE — Eddie Robinson, Paul Pearson, Jerry Schultz, Palmdale.

SPORTS CAR CLUB—Gerry Wright, commissioner, ext. 2074, Plant 1. Club meets first Wednesday of month, 7:30 p.m., Natural History Museum, Balboa Park.

SQUARE DANCING — Maury Scholz, commissioner, CY-5-3806. Call ext. 1245, Plant 1, for information. Beginners classes Wednesdays, 8 p.m., Uptown Hall, 30th and Meade Ave. Advanced classes Tuesday, 7:30 p.m.; party night, fourth Saturday of month, 8 p.m., both at American Legion Hall, 4061 Fairmount Ave.

STAMP CLUB—Jack Benedict, commissioner, ext. 1740, Plant 1. Club meets first Thursday of each month, 7:30 p.m., Conference Bldg., Balboa Park.

SWIMMING — Pete Beyrer, commissioner, ext. 1245, Plant 1. Family swim night first Saturday of each month starting in March, 7-9:30 p.m., at Mission Plunge.

TABLE TENNIS—Pete Beyrer, commissioner, ext. 1245, Plant 1.

TRAILER CLUB—Meets third Thursday of month, 7:30 p.m., CRA Clubhouse, Gillespie Field. Call Pete Beyrer, ext. 1245, Plant 1, for information.

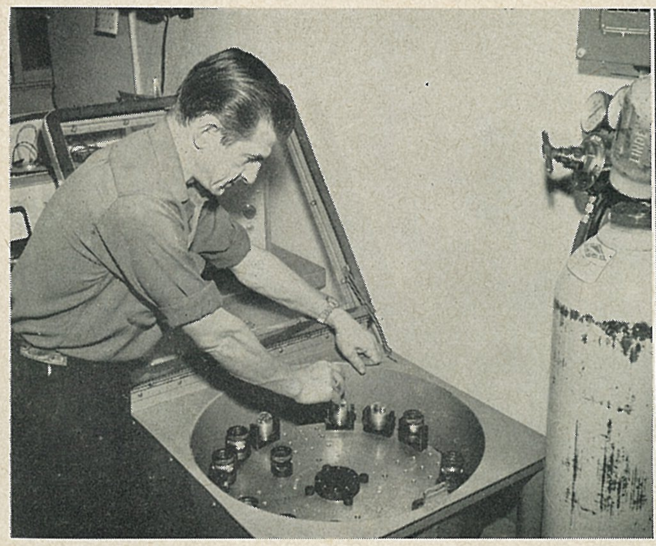
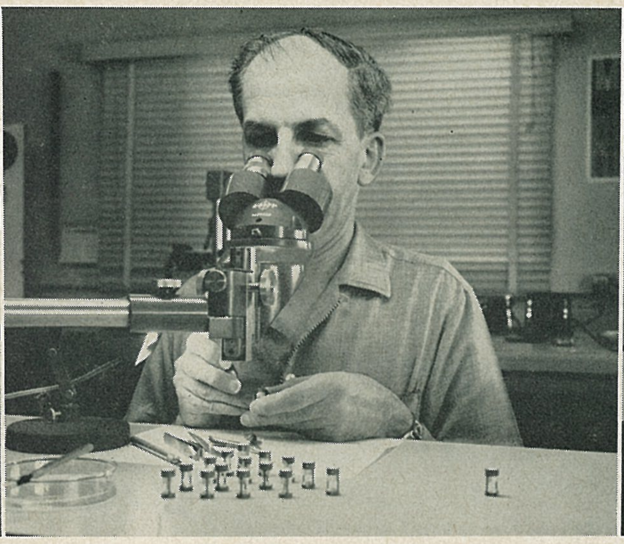
TROPICAL FISH—Pete Beyrer, commissioner, ext. 1245, Plant 1. Club meets second Tuesday, 7:30 p.m., CRA Clubhouse, Pacific Hwy. Workshop every Tuesday and Thursday, 7 p.m.

WATER SKI CLUB—Gene Sevigny, commissioner, ext. 1032, Plant 1.

WOMEN'S ACTIVITIES — Martha Woodberry, commissioner, ext. 1245, Plant 1.



SKATE SPREE—Some 90 youngsters and parents turned out Dec. 22 for ice skating party conducted by CRA skate groups at Convair SD and Astro. In left photo, Martha Woodberry, SD CRA commissioner, passes out tickets for turkey drawing. Next, Bud Davies, Astro CRA commissioner, awards prizes to potato race winners. In third photo are commissioners and turkey winner; spectators at far right are obviously enjoying proceedings. Frank Linn (SD Dept. 400) snapped photos.


YOUTHFUL OFF-SHOOT—Convair Instruments in San Diego, staffed by 32 persons, is presently producing four main-line products. In first photo, Harry Boyle (Dept. 1-97) tests shock overload indicators in centrifuge. In second photo, Lucien Berube (Dept. 1-97) strings tiny platinum wire used in liquid-gas detectors. Seated in third picture is Dr. E. E. Muehlner, chief project engineer. Project engineers with him are (from left): Douglas Meacock, E. Joseph Emkjer, George Shaheen.

'Convair Instruments' Nearing Third Birthday

Staffed by selected personnel, whose average age is under 30, Convair Instruments, a "company within a company," is expected to expand during 1961 at a well-measured rate.

Started in March of 1958 in a small office staffed only by a project engineer and secretary, Convair Instruments has burgeoned into a thriving company offshoot with four highly specialized product lines and 32 employees.

Known at one time as Datafax Instruments, the organization was formed to further refine and market instruments and instrument systems invented and developed as by-products of Convair's missile and aircraft operating divisions in California and Texas.

"We wanted to exploit to the fullest inventions conceived by Convair people and our present line is indicative of that approach," says Dr. E. E. Muehlner, who was Convair Instruments' one-man staff when it was founded, and continues as its chief project engineer.

Convair Instruments' present product lines are, in each case, derived from ideas (though greatly expanded and refined) that originated with employees.

With the build up of products and personnel Convair Instruments was moved in January of 1959 from its birthplace on La Jolla Blvd. in San Diego to its present location, 3595 Frontier St. It expanded further in 1960 when a separate electronics group was moved to 1314 Morena Blvd.

Convair Instruments is truly a "company within a company." The tightly-knit organization has its own engineering and research team, as well as its own production, purchasing and sales sections.

"We remain a small, extremely versatile organization, capable of moving quickly to sell improved hardware in a competitive market," says Dr. Muehlner. "And all our personnel are sales-minded, and constantly alert to changing requirements."

Present product areas of Convair Instruments are in the fields of vibration and shock, liquid level detection, and leak and flow measurements.

Convair Instruments will continue to research and expand in these fields, rather than delve into new areas where large research, tooling and "know how" costs would make the effort unprofitable, states the chief project engineer.

As it is, present products at Convair Instruments do more to show the organization's capabilities than its limitations.

Its first product, which Dr. Muehlner started working on when Convair Instruments was founded, is now in use on every Atlas missile. Called liquid-gas detectors, they measure the level of liquid oxygen during tanking, storage or transfer of the missile. Extremely delicate things to make, they involve stringing an almost invisible platinum wire only one thousandth of an inch in diameter.

At the present time this project area is being expanded to include detectors for not only liquid oxygen but also liquid hydrogen. The latter are being developed for use in Project Centaur at Convair Astronautics.

Another Convair Instruments' product is a vibration analyzer capable of pinpointing the exact source of vibration in an assembled jet engine. Trade-named AUTOTRACK Analyzer, it is expected to result in savings of millions of dollars now being spent on unnecessary removal of jet engines from operational aircraft.

Here, too, the field is being expanded. Now being flight tested on Convair jets are vibration monitors, which tell the pilot that a vibration exists on the plane and tells him how severe it is.

The organization's third product is about the size of a golf ball. A small, intricate, purely mechanical device, it indicates (a spring is tripped) excessive shock during shipping of sensitive instruments. Convair Pomona is using the shock overload indicators inside its Terrier and Tartar missile containers.

A fourth product is a Leakmeter, a mostly mechanical device which measures hydraulic leakages.

Convair Instruments is one of three endeavors directed and supervised by Ralph G. Monsees, assistant to the vice president and general counsel of Convair. Others are Dynapak and Project X, both now located in San Diego.

2,500 Visitors View Astro's Plant in 1960

Nearly 2,500 persons in groups ranging from local Boy Scouts to professional organizations from throughout the free world got firsthand looks at the Atlas missile program through visits to Astronautics last year.

These unclassified visits are individually tailored to the group concerned. They are coordinated by communication department's community relations and arrangements section (Dept. 120-2) which also handles classified visits for guests on official business.

"It is important that our guests understand the scope and complexity of Astronautics' role in national defense," says R. T. Blair Jr., chief of the section. "Each visitor will relay impressions of what he sees and hears here to the community in which he lives."

Planning for visiting groups, which average 25 but sometimes number as high as 500, starts well in advance of the visit. Each is studied to determine how best to convey the Atlas story. Top missile engineers and Convair executives are often "drafted" to address them.

Clyde C. Helmer and R. C. Siler assist Blair with visitor arrangements.



TEACHERS — Ray Blair Jr., chief of community relations and arrangements, right, greets teachers from abroad who visited Astronautics plant while on trip to U.S.

FW Research Facility Will Deal With Space

Convair FW is taking another step toward the space age by building a $200,000 Hyperthermal Research Facility (HRF).

The center will be used for research and development testing required to design the fast-flying space vehicles of the future.

Initial operation is tentatively set for May, 1961.

HRF testing will support the design of future Convair vehicles that will travel at speeds up to Mach 25—about 18,000 miles an hour. This could include orbital bombers, manned and unmanned recoverable space systems, and boost-glide vehicles.

"The thermal design of these vehicles will have major influence on the vehicle shape and structure," said L. H. Schreiber, senior propulsion group engineer.

"A research facility such as this affords the quickest and most reliable way of gaining the necessary information needed to design and build for the space age."

Heart of the facility is an electric arc plasma generator which heats the air supply to 15,000 degrees Fahrenheit. This will consume almost two million watts of electrical power. Then, expansion of the hot gas in a hypersonic nozzle will expose the test models to a Mach 15 stream—conditions simulating hypersonic flight.

The exhaust stream will be collected in a diffuser, then pumped to the atmosphere with very high capacity stream jet ejectors. Because of very high temperatures, all components will be water cooled and a special heat exchanger has been designed to cool the exhaust gas.

HRF was planned and designed entirely by Convair FW engineers. However, construction of the electric arc plasma generator has been subcontracted to Vidya, Inc.; the nozzle is under contract to Electro-Forms, Inc.; and Young Radiator is building the heat exchanger.

One of the many research aims of HRF is the testing of various ablative materials—materials that melt under the extreme temperature of hypersonic speeds—thus protecting the primary structure from excessive heating.

Air National Guard Units With F-102s Rise to Seven

Convair jet interceptors are now in action with seven Air National Guard squadrons across the nation and in mid-Pacific Ocean as three additional units received F-102As this winter.

Latest to be activated were units in Hawaii, South Dakota, and Pennsylvania. Other squadrons now equipped with Convair-built planes are located in Texas, Florida, and Louisiana.

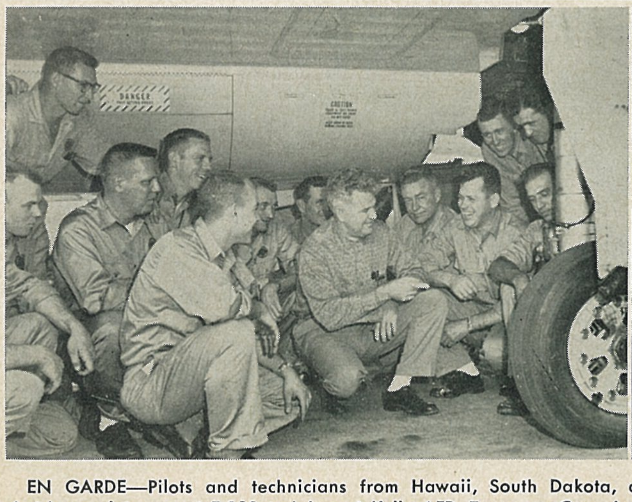
First Air National Guard unit to receive F-102s this last summer was the 182nd Fighter-Interceptor Squadron at Kelly AFB, San Antonio, Texas.

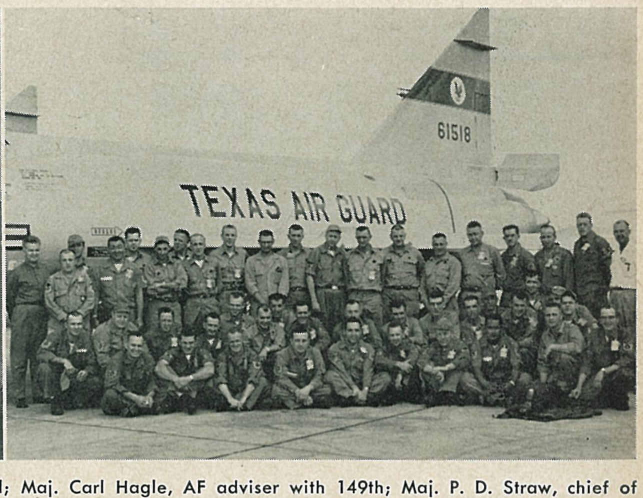
Convair-built planes next went to the 122nd FIS at Alvin Callender Field, New Orleans, La.; the 159th FIS, Imeson Airport at Jacksonville, Fla.; and the 111th FIS, Ellington AFB, Houston, Texas.

Within the last two months F-102s have been put into service with the 114th Fighter Group, Joe Foss Field, Sioux Falls, S. D.; the 199th FIS, Hickam AFB, Hawaii; and the 146th FIS, Greater Pittsburgh Airport at Coraopolis, Pa.

Convair SD men stationed with Air National Guard units in support of the Convair planes are Joe Gallant and Cliff Harrell, field service reps, and Frank W. Lightfoot, logistic support rep, at San Antonio; B. J. Bernhardt, field service rep, and L. G. Nelson, logistic support rep at New Orleans; Charles H. Greenfield, field service rep, and J. K. Underwood, logistic support rep, at Jacksonville; and C. M. Fox, field service rep, and D. J. Abele, logistic support rep, at Houston.

In the field with new ANG squadrons are C. I. Callison, field service rep, and John R. Noble, logistic support rep, at Sioux Falls; Matt Quilter, field service rep, and Robert L. Hayes, logistic support rep, in Hawaii; M. L. C. Williams and J. J. Gundaker, field service reps, and Raymond L. Costan, logistic support rep, at Coraopolis, Pa.



EN GARDE—Pilots and technicians from Hawaii, South Dakota, and Pennsylvania (left and right shots) complete recent F-102 training at Kelly AFB, Texas, as Convair planes go to Air National Guard units. In center shot, Gov. Price Daniel of Texas receives Convair scroll and F-102 model. In front row (from left) are Maj. Gen. K. L. Berry, adjutant general for Texas; Lt. Col. J. T. Crump, 149th Fighter Group commander; Gov. Daniel; Maj. Carl Hagle, AF adviser with 149th; Maj. P. D. Straw, chief of operation; Capt. Clay Kruckermeyer, group adjutant. In back row (from left) are Cliff Harrell and Joe Gallant, both Convair SD field service reps; Lt. Col. C. A. Quist Jr., chief of maintenance. J. J. Walden, Convair manager of San Antonio office, arranged presentation.

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SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.



OFF TO TWA—Convair 880 jetliners started moving out of San Diego plant this month as Trans World Airlines took delivery on red and white airliners. First 880s going to TWA went into passenger service last week on daily flights between Los Angeles and New York.

Alaskan Airlines Prexy Heads Visitors to SD

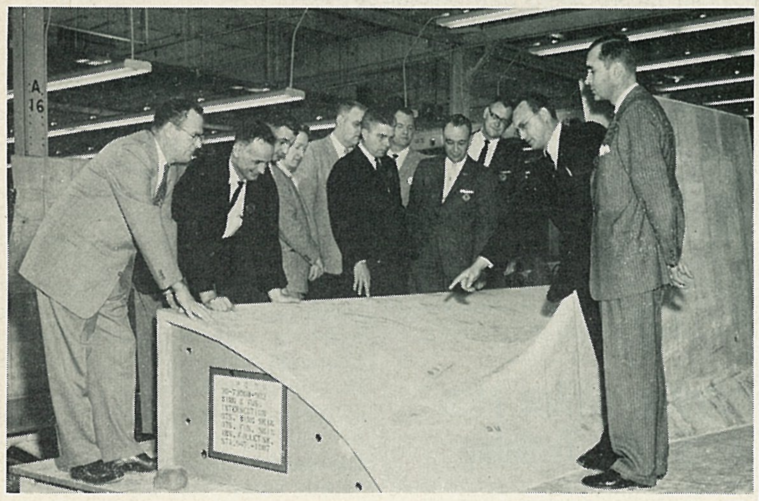
Charles F. Willis Jr., president of Alaskan Airlines, headed a group of his key staff personnel at Convair San Diego last week to become acquainted with the Convair 880-M jetliner and its production.

Coming to San Diego from Everett, and Seattle, Wash., headquarters of the northern airline, 19 Alaskan Airline representatives were scheduled to attend a five-day planners program presented by SD transport service. During the week training, maintenance, operations, and purchasing managers became familiar with the 880-M and its outstanding features. A bird's-eye view of all its systems was presented in the broad program—for instance, three hours were devoted to the jetliner's electrical power supply to give them a general idea of subject matter covered in 40 hours during the specialists' programs.

During the week, Willis requested a session in the cockpit procedures trainer to familiarize himself with the instrument panel, controls, and crew positions. Arrangements were worked out with SD production flight department.

Part of the Alaskan Airlines group have remained at San Diego to take the complete 880-M maintenance training courses in electrical systems, airframe systems, power plant, and electronics

(Continued on Page 2)



PLANT VISIT—Don Maxion of Convair SD customer service shows mold of Convair jetliner part in SD plaster pattern shop to Charles F. Willis Jr. (at far right), president of Alaskan Airlines, at SD last week for 880-M planners program. From left, others are J. B. Eschwege of Convair SD Dept. 15-4, and Alaskan Airlines key men: D. D. Glynn, A. F. Mathay, R. F. Whitting, A. Anderson, M. K. Williams, R. Foss, C. L. Miller and G. Sindt.

Convair-Cal. Western Program Offers Choice of 46 Courses

Registration will be held Feb. 6 and 7 at the Point Loma campus for the Convair-California Western University program.

Both eligible Convair SD and Astro people may register for management development courses in the International Relations Bldg. on Dupont St. between 5:30 and 8:30 p.m.

Tuition is prepaid by Convair for San Diego and Astro supervisors and non-represented flat-salaried persons approved for the program. Completing the fall semester were 124 from Convair SD and 122 from Astro.

This spring, 46 courses, including 10 in the graduate field, will be offered in the evening program. Those registering are urged to sign up for classes which will permit their attendance throughout the fall semester.

Night-shift participants may enter day classes at the Point Loma campus if they can attend for the entire semester.

It is necessary for new students to obtain signed approval from their superintendent or manager before registration. Forms are available from department heads or educational services offices at SD and Astro.

In charge of San Diego registration is D. G. Walton, ext. 1671, Plant 1; coordinating Astro registrations is R. E. Graves, ext. 1473, at Astro.

Astro and SD Lead Nation For Safety

Convair Astronautics was the safest airframe manufacturing operator in 1960 among the big companies, and Convair SD was in second place, unofficial reports indicate.

Final figures were expected to confirm an accident frequency rate of .37 (indicating disabling injury rate per million manhours) for Astro and a rate of .52 for Convair SD.

Million Saved At Convair SD By CIPs in '60

Cost Improvement Proposals from 15 flat-salaried Convair SD men alone saved the company more than half a million dollars during 1960.

Each of the 15 is eligible for the 1960 President's Award, top annual cost reduction honor.

During 1960 the savings total at Convair SD through the CIP program was $1,101,261. Eight hundred proposals were submitted, of which 204 were approved and installed.

Presented each year at Convair SD since 1953 by Convair's president, the award is traditionally made at a meeting of the Management Club. This year, the selection is anticipated in February.

The winner receives an individual bronze plaque and his name is engraved on a similar perpetual plaque in the operating division manager's office. He also receives a certificate facsimile and $250 merchandise gift of his choice.

"It is interesting to note," said D. L. Johnson, systems and procedures manager, "that the 15 President's Award candidates submitted only 18 of the 204 CIPs installed, yet accounted for $609,554, better than half of the entire CIP savings total."

Johnson, who is in charge of the CIP activity, said the 15 candidates' proposals and cost reduction records are currently being analyzed to determine the President's Award winner.

In the running for the honor are G. R. Bailey (Dept. 197), R. V. Brunner (Dept. 116), G. A. Clauder (Dept. 292), W. J. Durflinger (Dept. 31), R. H. Geary (Dept. 15), J. W. Hammond (Dept. 148), J. G. Hawkins (Dept. 6), E. R. Hockert (Dept. 34), H. H. Hurley (Dept. 197), J. D. Milling (Dept. 91), J. E. Mullican (Dept. 401), W. S. Nader (Dept. 140), J. R. Thompson (Dept. 292), V. Winslow (Dept. 6), and A. J. Woods (Dept. 400).

TWA Jet 880s Go Into Service Coast to Coast

Trans World Airlines inaugurated Convair 880 jetliner passenger service last week as four of the recently-delivered Convair jet transports winged coast-to-coast on TWA scheduled flights.

First 880 flights left Los Angeles and New York last Thursday (Jan. 12) to service five cities across the United States. Two round trips are offered daily from both West and East Coast terminals.

Cities served by first 880 flights are New York, Chicago, Phoenix, Las Vegas, and Los Angeles. One flight each way is scheduled through Las Vegas, and the other round trip routed through Phoenix.

TWA 880 Superjet service will be expanded this week with a round-trip flight connecting San Francisco, Los Angeles, Chicago, and Dayton beginning Jan. 20. On the same day a round-trip flight will go into service between New York and Chicago. Due to start next week (Jan. 24) is another round-trip run between San Francisco and Chicago.

First Convair 880s going to TWA started moving out of San Diego field operations early this month as the airline began acceptance of Convair jetliners—delayed for some months during financial negotiations. One of the 615 mph airliners had been based at the Kansas City, Mo., headquarters since last spring for crew and operations training.

Field operations at Convair SD worked on a round-the-clock basis for several weeks readying first 880s for TWA. Seven are due to be delivered during the month, making eight of the total order of 20 to be received by TWA.

In addition to TWA planes going out of the plant this month, two other 880s will be delivered to Northeast Airlines by the end of January to complete the six it will receive under a lease agreement.

Northeast started 880 service in another country for the first time last week as it extended its Miami to Boston run into Canada. Regular flights will see Convair 880s landing at Montreal.

Delta 880 Sets New Houston-NY Record

A Delta Air Lines 880 set a new unofficial speed record from Houston to New York late last month, according to word from Convair SD field service reps based at the Texas city.

The Convair jetliner whizzed over the route in 2 hrs., 9 min., cutting the scheduled time of 2 hrs., 37 min., by 28 minutes.

Retirements To Affect 200 During Month

Approximately 200 are retiring this month at Convair SD under Convair's new retirement program.

All are 65 years of age or older and most are over 68. Approximately half are in their 70s and one is 80.

Retirement follows extensive counseling in employee services. Benefits include monthly retirement checks, $1,000 in life insurance, retired employee identification card, CRA privileges and a **Convairiety** subscription.

Names and department numbers of those who retired during the first two weeks of January are:

Dept. 3-1, J. J. Baxter, E. R. Beck, I. K. Wisley; Dept. 7, A. J. Bergman; Dept. 14, B. E. Flahaven, P. B. Harvey; Dept. 15, H. H. Carr, Bessie D. Cooper; Dept. 24, I. J. Heckman.

Dept. 25, L. J. Allgeyer, W. C. Bergner, W. G. Block, W. E. Brautigam, O. T. Briley, O. M. Brown, M. N. Chavez, R. W. Clark, W. T. Collins, Gennaro Cracchiolo, Rush Cravens, N. J. Fine, G. W. Geer, J. W. Hanselman, Francis Hayden, R. E. Houck, E. R. Jex.

Dept. 31, J. A. Bauman, C. F. Bowker, Baltazar Cvikota; Dept. 34, P. E. Gavin; Dept. 44, N. W. Bayne; Dept. 91, J. M. Lestrans; Dept. 101, E. G. Baits, C. F. Brooke, Perry Helmuth; Dept. 117, F. S. Crivello.

Dept. 120, H. H. Cummins; Dept. 133, J. S. Almond; Dept. 135, R. E. Bloomer; Dept. 142, A. B. Hubbard; Dept. 180, P. H. Jardine; Dept. 188, R. E. Collins; Dept. 192, R. S. Carson, C. B. Huffman; Dept. 197, L. K. Potter, P. J. Korthals.

Dept. 206, W. M. Gates; Dept. 215, A. K. Banirian, E. C. Clark; Dept. 216 Sarah T. Helmuth; Dept. 218, C. C. Barkley, B. R. Boyden, R. L. Guthrie, F. H. Hawksworth; Dept. 249, C. H. Boggs; Dept. 280, Jack Bryan; Dept. 288, R. L. Adams; Dept. 292, C. F. Clapp.

Dept. 400, E. E. Asbury, C. F. Baldwin, H. H. Cameron; Dept. 401, N. J. Ayers, H. F. Bandy, J. F. Bettencourt, J. A. Blessing, F. W. Bockemuehl, T. C. Coppinger, G. W. Davey, W. E. Derby, L. J. Hack, Virinda T. Lamb.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Jan. 16 through Jan. 31.

Thirty-year: Dept. 188-1, F. W. Bornemann.

Twenty-five-year: Dept. 1-71, R. L. Bayless, J. H. Famme; Dept. 100, Avis Clarke, H. G. Rote; Dept 110, A. H. Kimble; Dept. 133, H. D. Hershey; Dept. 400-1, W. C. Bowlen.

Twenty-year: Dept. 3-8, J. W. Swank; Dept. 6, W. F. Dust, J. M. Kelly, G. E. McPherren, A. C. Truez; Dept. 14, M. R. Holmberg, R. H. Johnson, Dorothy M. Luscomb; Dept. 25, N. J. Montgomery, J. N. Strong.

Dept. 31, William Arends, F. J. Garcia-Legaspi; Dept. 69-0, D. T. Ostenso; Dept. 110, J. N. Bergen; Dept. 123-0, J. R. Lewis; Dept. 136, C. R. Kellogg; Dept. 137, G. R. Mayfield.

Dept. 138, W. A. Moore; Dept. 148, J. R. Morey Jr.; Dept. 171, P. A. Wuthnow; Dept. 180, C. P. Glover; Dept. 192, Morris Frankel, J. A. McSparron; Dept. 197-3, D. B. Seaburg; Dept. 215, Edward Krupicka; Dept. 288-3, A. L. Sack; Dept. 401-4, R. W. Verdon.

Fifteen-year: Dept. 6-03, W. J. Holmes; Dept. 14, Ava B. Gray, J. F. Jaehn; Dept. 31, M. E. Brown, R. G. Williams; Dept. 97-1, R. E. Nelson; Dept. 146, R. S. Reyes; Dept. 149, J. A. Pagani; Dept. 180-0, H. H. Dodson.

Ten-year: Dept. 1-64, J. H. Happy; Dept. 3-7, L. E. Woll; Dept. 5, A. G. Mitchell; Dept. 6, C. E. Beddoes, J. H. Harger, J. C. Lievens, F. B. Scott, V. V. Voll.

Dept. 7, Margaret D. Coon, Electa B. Eales, Sylvia F. Lindstrom, L. J. Noble, P. E. Pease, Rose M. Raimondo, C. L. Ross, Nita W. Sylvester, J. T. Welch; Dept. 10-9, W. Z. Quijada; Dept. 11-2, S. J. Harris.

Dept. 14, E. N. Bowring, Elsie G. Halshaw, Inez B. Magnana, S. P. Medina, A. J. Schurrer; Dept. 15-4, J. P. Spieker; Dept. 21-1, R. A. Grapentine, C. E. Massey, D. G. Newman, E. E. Smith, R. M. Smith, L. M. Timlick, J. S. Wolfe.

Dept. 24-3, A. L. Jacobson; Dept. 25, J. J. Aylward Jr., J. P. Chacon, Rene J. Galibois, G. J. Nikos; Dept. 31, L. E. Cockrall, Ferrell Reed, F. J. Schmidt, W. O. Wilson; Dept. 34-2, L. K. Carlile; Dept. 44-7, R. B. Bailey.

Dept. 90-0, W. J. Farrar; Dept. 91, Verna R. Burton, Ruth S. Ersland; Dept. 97, David Merritt, Daniel Rodriguez; Dept. 101, R. W. Ferrell, Helen H. Heaton, W. L. Rix; Dept. 102, Nellie Sheldon; Dept. 115, R. C. Morales; Dept. 117, Mary B. Talbot.

Dept. 123, H. H. Keel; Dept. 129, Sarah M. Castro, Eleanor M. Evans, W. R. Kurz, Florence Ojeda; Dept. 133, Golda S. Dixon, Dorothy J. Gore, A. E. Harrison, A. G. Tucker, Mildred S. White; Dept. 134, Joan L. Hayes; Dept. 135, R. E. Bauman; Dept. 137, Alberto Feria; Dept. 138, Roy Hay, Georgia L. Keeran, H. O. Kerkow.

Dept. 140, L. G. Lopez, H. W. Priest, Angeline M. Vanderpool; Dept. 142, Roy Dickey, A. T. Hart; Dept. 146, M. G. Henos, J. M. Marquez, M. L. Moore, R. G. Peete Jr.; Dept. 149, J. P. McCulloch.

Dept. 160, H. L. Berry, G. S. Clinkscales, J. T. Trusty; Dept. 171-0, R. L. Rice, R. T. Whitley; Dept. 180, K. A. Nesbitt; Dept. 188, Edna T. Bishop, Davida V. Espinoza; Dept. 190-2, C. E. Plummer; Dept. 192, R. H. De Woolfson, R. E. Hart, Gertrude K. Kenney, William Kline Jr., Catherine M. Vallon; Dept. 197-5, C. W. Case.

Dept. 201, A. L. Pearson; Dept. 204, C. D. Brooks, E. E. Martinez, J. E. Wallace; Dept. 216, Marguerite G. Howerton, Helen W. Quillin, Sue M. Rodgers; Dept. 218, R. S. Denny, Elizabeth W. Evans, R. F. Guerrero, Amalia L. King, Ernestine V. Lopez.

Dept. 230, C. L. Griggs, Stephen Yurcich; Dept. 231, Ronald Collins; Dept. 232, Dorothy I. Sanders, Mabel K. Yale; Dept. 233, Loretta F. Haskins, W. W. Norris; Dept. 249, Marie M. Stickel; Dept. 267, R. T. Baines, W. G. Whitted; Dept. 271, D. W. Condee, J. B. Eaton; Dept. 288-3, K. A. Miller.

Dept. 400-2, G. M. Hood; Dept. 401-5, R. L. Brehl, R. D. Clubb, J. G. Jacobo, J. P. Kinikin, M. J. Merritt, B. G. Pierce, W. P. Redding, Phyllis K. Ruggles, T. L. Schlotman, E. F. Smith, R. G Whalin, Genevieve S. Willig.

PALMDALE

Ten-year: Dept. 321-1, H. R. Papke.

Promotions

SAN DIEGO

Promotions to or within supervision effective Jan. 2.

Dept. 6-01, Engineering: To product support group engineer, A. W. Kellogg.

Dept. 7-40, Electronics: To asst. foreman, H. D. Palmer.

Dept. 34-5, Material Procurement: To buying supervisor, D. V. Mardis Jr.

Dept. 188-1, Inspection, Plant 1: To inspection asst. supervisor, A. G. Blakey.

Dept. 292-1, Manufacturing Control, Plant 2: To M/C asst. foreman, C. D. Allenson Jr.

Births

SAN DIEGO

POAT—Son, Charles Edward, 8 lbs., born Jan. 4 to Mr. and Mrs. Charles L. Poat, Dept. 7-53.

Deaths

SAN DIEGO

BANKERD—Frederic T., Dept. 6. Died Dec. 31. Survived by brother and two sisters.

COBB—A. W., Dept. 133. Died Dec. 27. Survived by wife, Mary H.

Personals

SAN DIEGO

My deep appreciation to Plant 2 friends for the cards and beautiful flowers sent at the death of my mother.

Virginia C. Morrison, Dept. 401-7.

* * *

I wish to express sincere appreciation and thanks to all my Convair friends at Plant 1 and 2 for their contributions, personal calls, flowers, and messages of good will while I was in the hospital.

Guilford C. Ross, Dept. 101.

* * *

We wish to express our gratitude to all Convair Astronautics and San Diego employees for their many acts of kindness and help during the recent loss of our husband and father, C. D. Smith, Dept. 141, Convair San Diego.

Frances Smith, Dept. 170 Astro.
Ronald Smith.

* * *

I wish to express my grateful appreciation to Convair friends, particularly those in Dept. 401, for their assistance following our accident.

E. L. (Gene) Zimmerman, Dept. 401.

* * *

To the person who found my charm bracelet and left it with the guard at Rose Canyon Jan. 12, please accept my deep appreciation.

Dorothy Taul, Dept. 4.

Trip to Europe Begins April 8

Detailed information on a European trip, planned for Convair SD people this spring, will be given at a meeting scheduled next Friday (Jan. 27).

All Convair San Diego persons and members of their families interested in the trip and tour may attend the 7:30 p.m. gathering in the Convair cafeteria executive dining room. Walter Peters, vice president of Lanseair Travel Service, Inc., which is in charge of tour arrangements, will be present to answer questions.

Trip dates are April 8 (departure from Los Angeles) to April 22 (return from Copenhagen, via a Scandanavian Airlines System DC-8C). Round-trip flight cost is $375.

Those who wish to take the tour of European countries in addition will pay a total of $685 for both flight transportation and tour.

Complete information is available from CRA office at SD employee services, Bldg. 32, Plant 1, ext. 1245.

New In-Plant Park Stickers Required

New in-plant parking windshield stickers will be required on all private vehicles entering Convair San Diego facilities starting Jan. 23.

D. L. Johnson, manager of systems and procedures, said the annual review of those qualifying for the parking privilege has been completed and that the decals will be issued through department heads.

Letters of instruction accompanying each decal should be carefully read. Stickers must be permanently affixed to the windshield. Additional instructions covering accidents on Convair property are also included.

DEPT. 401 MAN WEDS AT VEGAS

Marriage of J. M. Morales of Convair SD Dept. 401 to Helen Vehm, formerly of Chicago, took place Dec. 27 at Las Vegas. The couple are making their home in San Diego.

★ Convairiety ★

Founded Sept. 1, 1948. Published in six editions (Fort Worth-Daingerfield, San Diego-Palmdale-Holloman, Astronautics, Astronautics Off-Site, Pomona and the Mail) by Convair Industrial Relations, General Office, San Diego, Calif. Logan Jenkins, editor-in-chief.

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SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.

90-Mile Rally Route Mapped

Fourth annual "Seat of the Pants" rally, covering 90 miles of paved San Diego County roads, will be held Sunday (Feb. 12). All Convair SD persons are invited to participate free.

Sponsored and conducted by Convair SD Sports Car Club, the first car will leave the Convair Astronautics parking lot at 12:01. Award ceremonies will take place after the events at the Flying Hills Country Club.

Traditionally, one of the biggest in terms of participation, the rally will last about three and one-half hours, including a 15-minute rest stop.

Trophies will be given for the first through 10th-place finishers in the overall class; first through third-place cars in the Convair class; first through fourth-place cars in the novice class; and special "zero leg" trophies.

* * *

Next meeting of Convair SD Sports Car Club will be held Feb. 1 at 7:30 p.m. in the Balboa Park Natural History Museum.

A short business meeting and two movies, "The Three-Pointed Star" and "African Rally," are scheduled.

Convair SD To Host Library Association At Monthly Session

Convair San Diego will be host to members of San Diego Chapter of the Special Libraries Association tomorrow (Jan. 19) at a dinner meeting in the Convair executive dining room on Pacific Hwy.

Keith Blair, SD chief librarian, as chairman of the newly-formed group's first monthly meeting, anticipates an attendance of 50 librarians from industries, businesses, governmental agencies, and similar organizations in the San Diego area.

Welcoming the guests will be T. A. Billings, SD chief administrative engineer. Merle Boylan, head of technical processes in Convair SD engineering library, will speak on "Library Applications of Punched Tape Techniques." The meeting will conclude with a tour of the SD engineering library in Bldg. 5, Plant 1.

Treasurer of the group is Louis Canter, chief librarian at Astronautics, while numbered in its membership are 14 Convair SD and Astro librarians.

Medical Deduction For Expense Listed

Dependent insurance paid during 1960 may be deducted by those Convair SD and General Office employees itemizing their medical expenses for 1960 income tax returns.

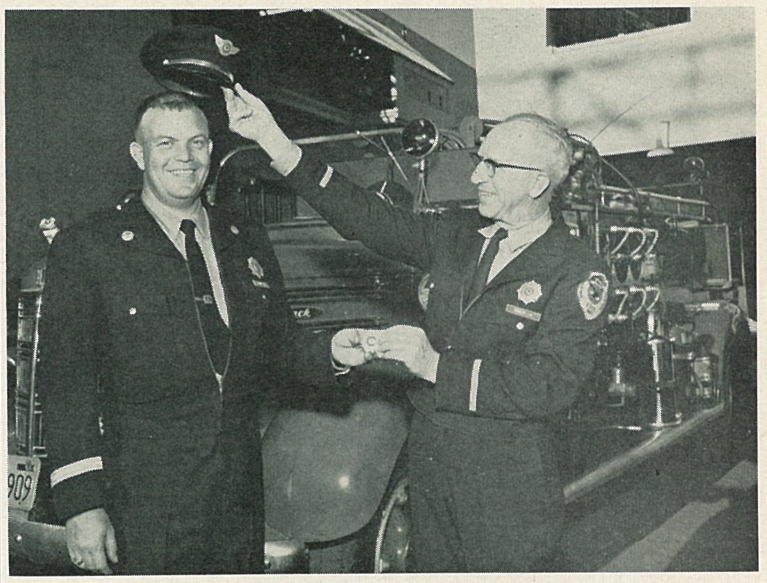
Deductions are at a rate of $2.77 per week. For those employees in a bargaining unit that did not accept major medical benefits for dependents, the cost was $2.48 per week.

Further, that portion of the disability insurance premium applied toward hospitalization (15.6 per cent) also may be deducted. For example, the employee who was paid $3,600 or more by Convair during 1960 paid $36 in disability insurance. Therefore, $5.62 of that amount is deductible as medical expense. An employee who has paid only $2,000 during the year paid only $20, and could deduct $3.12.

Radio Club Class Will Start Jan. 31

First session of a code and operating procedures class conducted by Convair SD Radio Club will be held Tuesday (Jan. 31) at 7 p. m. in ham headquarters on Harbor Drive.

Registration for the class, which primarily is intended to prepare beginners for novice license examinations, can be made by calling Jim Lack, ext. 2958, Plant 1.



CHANGE OF COMMAND—D. D. Dimmitt Jr., (at left) switches hats with I. K. Wisley as he takes badge of office as new fire chief of Convair San Diego. Wisley retired Jan. 6 for second time in long career as fireman.

Dimmitt New SD Fire Chief As I. K. Wisley Retires Jan. 6

D. D. Dimmitt Jr. is new fire chief at Convair San Diego, effective the first part of this month, according to F. G. Merritt, chief of industrial security.

Dimmitt succeeds I. K. Wisley, who retired Jan. 6.

A native of Canon City, Colo., Dimmitt joined Convair SD's fire department the latter part of 1950 after two years in the U.S. Marine Corps. He has been a fire lieutenant at SD since June of 1955.

Wisley has a long record of service with fire departments, retiring in 1951 as a battalion chief of the San Diego City fire department where he had piled up 27 years of duty. He came to Convair SD fire department in November of the same year and was named chief in May of 1959.

A group of co-workers and friends at Convair SD joined in honoring Wisley on the day of his second retirement.

Counseling Offered For Adult Courses Beginning Jan. 30

Convair people in San Diego planning to enter Adult Education classes at Midway Adult High School, 3249 Fordham St., or Pt. Loma Adult Center, 2335 Chatsworth Blvd., are urged to register immediately.

New day and evening classes begin Jan. 30. Students interested in high school graduation should contact the school immediately in person or by phone for a counseling appointment.

Of special interest to men and women in business and industry are two classes in reading improvement with sessions scheduled 7-9:30 p.m. Mondays and Wednesdays, or Tuesdays and Thursdays, at Midway Adult High School.

Convair SD people may call the educational services office, ext. 1827, Plant 1, for example, or the school office, AC-3-1671.

Alaskan Airline Men At SD For Training

(Continued from Page 1)

systems. This program will extend for six weeks. Some had already received training on the 880 at Kansas City in TWA's training classes.

Also at San Diego last week for a similar planners program were 11 Federal Aviation Agency representatives from points throughout the country. First formal maintenance training for FAA on the 880-M is tentatively scheduled to start in June. Avensa personnel are due to arrive from Venezuela the latter part of next month to enter the 880-M training program.

Convair Man Rolls 728 Bowling Series

First keg series over 700 ever rolled in the Convair SD 850 league at Tower Bowl was chalked up this month by Allison Hoag (Dept. 266).

Hoag strung games of 247, 248 and 233 for a 728 total, highest pin score ever registered in the 850 league which has been in operation for 14 years.

General Dynamics Stock To Be Prizes At SD Club Meeting

A short talk on the latest developments concerning the proposed shift of the Los Angeles Chargers to San Diego will be given at tonight's meeting of Convair SD Management Club in the El Cortez Hotel.

The football facts will be presented by Ron Seymour, public relations manager for San Diego Junior Chamber of Commerce.

Principal speaker tonight will be W. Ballentine Henley, one of NMA's top circuit lecturers. Also scheduled is a special drawing for two shares of General Dynamics Common Stock.

W-2 FORM MAILING BEGINS THIS WEEK

Mailing of W-2 forms to Convair San Diego and General Office hourly people began yesterday (Jan. 17) and should be completed within a week, said J. L. Terrien, accounting payroll supervisor.

The forms, which show total earnings for the year, income tax withheld, and Social Security deductions, must be attached to all income tax returns.

Terrien's office, which handles payroll for Convair San Diego flat-salaried and hourly, including those based at Palmdale and Holloman AFB, and General Office hourly personnel, said that forms will be mailed to listed home addresses.

Forms will go to General Office flat-salaried persons by the end of this month, said R. F. Meeker, staff assistant-General Office payroll.

SD Muzzleloaders To Shoot Sundays

Something new has again been added by CRA at Convair SD for gun enthusiasts.

Starting Feb. 12, the second Sunday of each month will be set aside for shooters with muzzleloading rifles. Match events will be held under the direction of George Rowley (Dept. 171).

The second-Sunday-of-the-month shoots will get under way at 9 a.m. For those who ask, muzzleloading explanations and demonstrations will be given. Spectators are invited.



COLD SPOT—Northeast Airlines' first Convair 880 meets Old Man Winter for first time as it stands on snow-banked Boston airport in near-zero weather last month. Worst storm ever to hit area blew up as rousing send-off to 880s carrying passengers from wintry Boston to warmer Florida climes in mid-December.

Vast Capability For Space Material Tests Offered by SD Laboratories

Completion of Convair San Diego's new engineering materials and processes laboratories this month brings to Convair one of the finest laboratories of its kind in the country.

R. C. Loomis, Convair vice president and San Diego manager, emphasized the wide scope of laboratory capabilities now available at Convair SD in announcing the culmination of the year-and-a-half renovation program.

Thirty separate laboratory functions for research and development into every phase of fabrication for aircraft and space vehicles are now operating in the remodeled and expanded area on the lower floor of Bldg. 5 at Plant 1. Properties and reactions of every type of material—metals, plastics, ceramics—can be analyzed and evaluated, from reaction to extreme high and low temperatures to susceptibility to fungus or corrosion. Liquids—such as jet fuels—sealants, adhesives, finishes are studied for composition and effectiveness.

Work is carried on constantly in the development of new types of materials and processes for use in space vehicles in years to come.

"Our modern and up-to-date materials and processes laboratories make it possible for Convair to maintain pace with the space age," said W. M. Sutherland, group engineer in charge of the lab operations.

Remodeling the northwest section of Bldg. 5 began in July a year ago. Atomic Investments Inc., general contractor, completed first phase of the $600,000 renovation program in February of last year, finishing the entire project this month. Laboratory work continued without interruption throughout the whole renovation period. SD plant engineering drew up specifications and coordinated construction.

With 3,400 square feet added to the original laboratory area the total space now includes 18,700 square feet, stretching 125 feet along the west side of the building and 170 feet along the enclosed area's south limits.

Modern fluorescent lighting; new work counters, cabinets, and hoods; decorative color scheme with combinations alternated in separate lab sections highlight the remodeled space.

The entire laboratory area will be air conditioned or heated and ventilated by units installed on the mezzanine. Also on the upper level are sections for metallurgical special projects, metallography, and glass blowing.

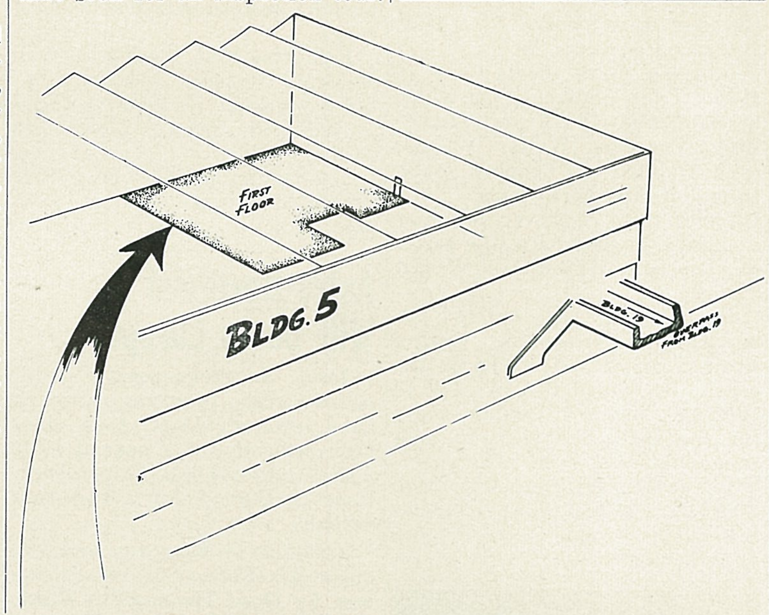
On the lower level are located separate lab areas for lab functions: mechanical properties, creep test, heat treatment, vacuum fusion, welding, ceramics, thermal properties, X-ray diffraction, emission spectroscopy, analytical chemistry, microchemistry and bacteriology, radiochemistry, vacuum metallurgy and plasmatron, absorption spectroscopy, nuclear magnetic resonance and mass spectroscopy, organic chemistry, chemical processes, plastics and adhesives, finishes, corrosion, electrochemistry, high vacuum, hazardous testing, paint application, accelerated weathering.

Storage rooms are provided on the mezzanine and a 14x21-ft. stockroom on the first floor.

Administrative, engineering, and clerical offices are on the second floor of Bldg. 5 in the 5-2-H area along the center aisle. Offices are connected by direct inter-com system to laboratories below.

Major items of new equipment now going into the laboratory include a portable mass spectrometer capable of analyzing gases in minute concentrations, metals, and a wide range of organic and plastic materials; a high rate of loading machine to subject specimens to fast-acting forces under various temperature conditions; and a vacuum balance which automatically records weights of material in controlled atmospheres and temperatures, or changes in weight over periods of time.

Sutherland said that the new materials and processes laboratories will be thrown open some time soon for an inspection tour.



F-102s Trouble-Free During Service in Air National Guard

Convair-built F-102As, assigned to the Texas Air National Guard at Ellington AFB, near Houston, are piling up a record of trouble-free hours in the air since their arrival there last fall.

Don Abele, Convair SD logistics support representative, and Clyde Fox, SD field service representative, report that the Convair jets had, up to early this month, flown 969 hours in one of the smoothest conversions they had ever witnessed.

Not one of the craft has been grounded due to lack of a part since they went into action with the 111th. Capt. Ted Plant, commander of the 147th MATRON Base Supply, attributes the performance record to efficiency of his own crew and cooperation of all maintenance and supply personnel.

'Temporary' Position Lasts For 10 Years

Joe Lestrans didn't need the timepiece given him at his retirement this month to keep him on the job during his 10 years with timekeeping at Convair SD.

He had never been absent a single day from the time he was hired by Al Vernon, timekeeping general supervisor, Nov. 3, 1950. He took the job just to "try it out"—at the most, for six months, before moving to Los Angeles. Those six months stretched into 10 years without an absence, or tardy mark, barring a couple of emergencies!

Redstone Arsenal Men Join Seminar

Three men from Redstone Arsenal in Huntsville, Ala., are among the 40 attending the fifth Convair FW value control seminar.

Sessions started Jan. 9 and end Jan. 20.

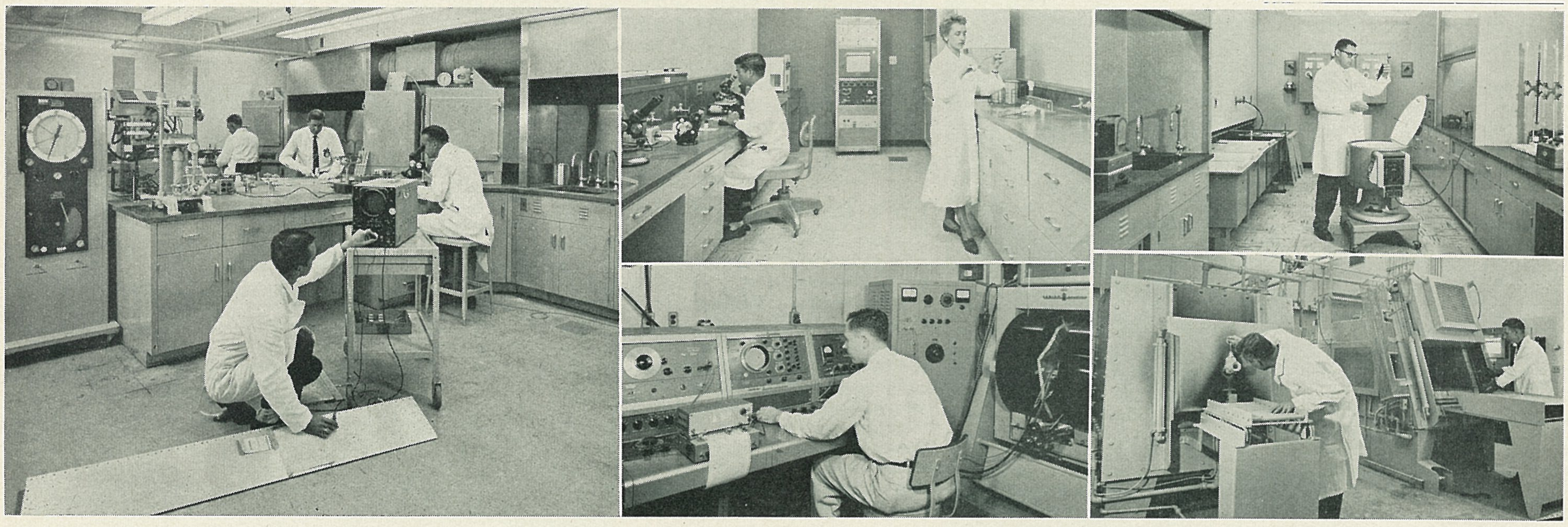
Carl G. Estler, Charles J. Borum and Harry H. Hepler are attending the seminar with an eye to setting up a program at Redstone.

"We're extremely pleased to have these men participate," said B. W. Kahla, deputy division coordinator for the program.

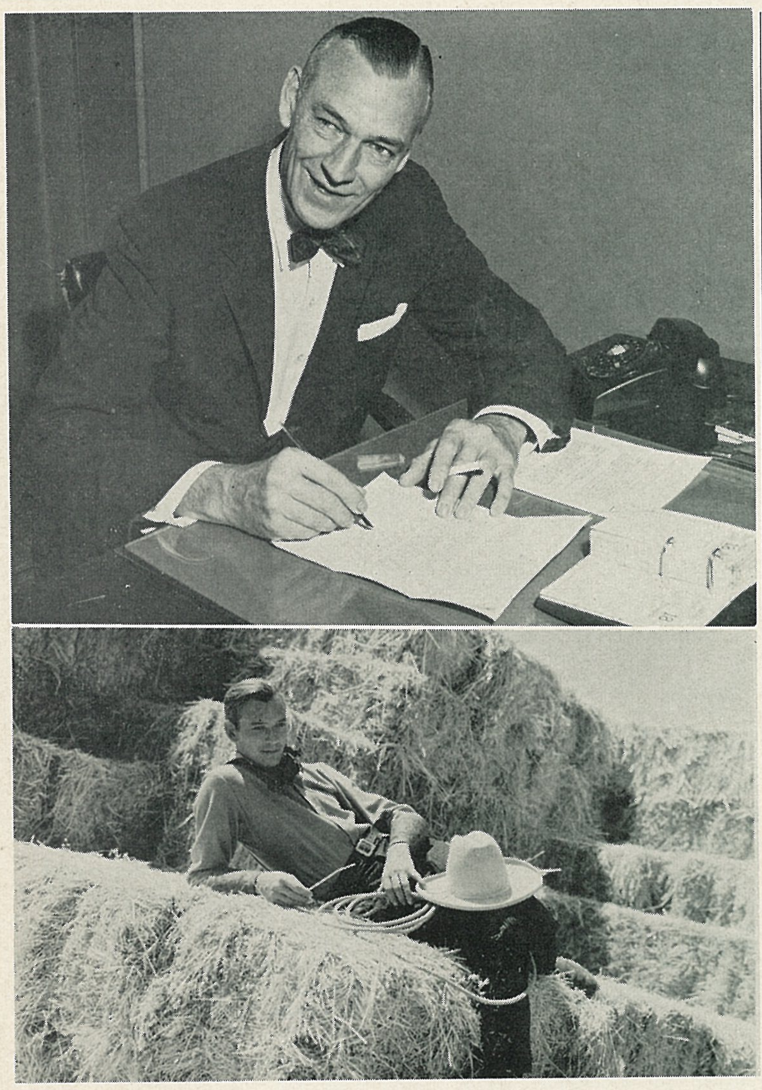
Electrical Engineer Dies on Hiking Trip

Frederic T. Bankerd, 48, SD Dept. 6 electrical engineer, suffered a heart attack and died Dec. 31 while hiking with companions in Arizona.

A native of that state, he had been with Convair 15 years. He was a member of the Sierra Club and the Convair Spanish class. Surviving are a brother and two sisters.



NEW QUARTERS—Shown above are few of 30 lab functions now located in modernized materials and processes laboratories area in Bldg. 5 at Convair San Diego. At left, Harold Pearson, Harold Hunt, Gordon Picotte, Bert Bergstrom check materials and panels for defects in plastics and adhesives section; (top center) John Trias and Anita McGowan in microanalysis and fungus area; (top right) Ray Reschan stands beside centrifuge in electrochemistry lab; (bottom center) E. E. Keller at nuclear magnetic resonance control panel analyzing chemical structure of materials; (bottom right) Gordon Sawyer looks through window into furnace and Gerry Langford places material in oven in heat treatment area. Sketch above points out lab area location in northwest section of Bldg. 5's ground floor.



MEMORIES—Smith Ballew of Convair FW is pictured above as he appears today (time has brought few gray hairs) and below as he looked in 20s as singing cowboy in Hollywood films.

In Roaring 20s

Smith Ballew, Planner at FW, Recalls Entertainer Career

Smith Ballew left the klieg lights of Hollywood for the fluorescent lights of Convair and he's perfectly happy about it.

Ballew, in FW's long range planning, was on top of the entertainment heap for a quarter of a century—movies, radio, night clubs.

"I don't miss show business," he says. "Twenty-five years is enough."

The 25 years were action-packed for Ballew. He starred in at least 20 movies. With his own orchestra, he made 5,000 recordings during a 10-year stay in New York. He succeeded Al Jolson as singing master of ceremonies on one of the biggest national broadcast series of 1936, "Shell Chateau."

Scrapbooks tell part of the story.

Ballew organized his first band while a student at the University of Texas. He toured eastern and middle western states in the mid-20s.

He went to New York in 1926 and played with George Olsen in the musical comedy success, "Good News." He organized his own Manhattan orchestra in 1929 and was fantastically successful for years, with rave reviews.

The late Marguerite Clark, movie great of silent films, persuaded Ballew to take a screen test after hearing him in New Orleans. The only other person she ever recommended for a test: Douglas Fairbanks Sr.

Ballew's first movie was in 1935, "Palm Springs," in which he co-starred with Frances Langford. Producer Walter Wanger congratulated the budding young actor on his performance. His favorite roles, however, were as a singing cowboy hero in a series of Zane Grey-Harold Bell Wright stories.

During the war Ballew left movies for production control work in an aircraft plant on the coast. He joined Convair FW in 1952 as a buyer of landing gears for the B-36, and went to long range planning soon afterward.

He still hears regularly from many Hollywood friends, including Arlene Judge, Cesar Romero and Zachary Scott.

M. W. Smith Picked For Naval Academy

Convair Pomona's Michael W. Smith (Dept. 27-3, second shift) has received an appointment to the U. S. Naval Academy at Annapolis, Md., from former Rep. George A. Kasem.

Smith, 19, is a student at Mt. San Antonio College in addition to his full-time employment as a technical computer at Convair Pomona. He was graduated in 1959 from Bonita High School, and last year attended California State Polytechnic College. He joined Convair last August.

Convair Sons Earn Scholastic Honors

Billy Martin, who is attending SMU on a Convair Sons scholarship, has been initiated along with his brother Bobby into Sigma Tau honorary society.

They are sons of C. G. Martin, Dept. 2 at Daingerfield.

Members of the society must rank scholastically in the upper one-third of juniors and seniors in SMU's school of engineering and have at least a "B" average.



GOALS — Evelyn Thrall, CRA accountant at Convair SD, holds copy of paperback "Goals for Americans" now on sale at employee services in all of Convair's operating divisions. Special editions will sell for 75 cents (instead of $1 at regular stores) and give complete text of report of "President's Commission on National Goals" as well as series of essays on vital national subjects written by recognized authorities. "Goals for Americans" has been highly recommended by Frank Pace Jr., board chairman of General Dynamics Corporation and vice-chairman of commission.

First 990 Warms up For Maiden Flight

Convair's newest jet transport, the 990, is slated for its maiden flight this week following successful taxi runs over the week end.

Don Germeraad, chief engineering test pilot at Convair SD will be at the controls as the huge airliner streaks aloft on first flight. Germeraad piloted the first Convair 880 flight, almost exactly two years ago—Jan. 27, 1959.

First 990s will be going into service with American Airlines later this year following flight program for FAA certification.

Blitch Will Speak At Space Meeting

John D. Blitch, assistant for programming techniques to August C. Esenwein, Convair executive vice president, will speak to the Institute of Aerospace Sciences at 8 p.m. Jan. 25 at Arlington State College, Arlington, Tex.

He will speak on "PERT and Pep as a Management Tool" in the school's engineering auditorium.

A retired rear admiral, Blitch was formerly task coordinator for PERT (programming evaluation and review technique) on a major missile program. This technique provides the means necessary for modern management to "schedule, control, forecast and evaluate their programs more effectively."

40 TO ACCOMPANY B-58 TO KIRTLAND

Hustler No. 4 will make several more flights from Convair FW before starting two-component pod testing out of Kirtland AFB.

About 40 Convair FW people are tentatively slated to make the move to Kirtland AFB in late January or early February.

The Kirtland move is being timed to coincide with the changing of fall and spring semester school terms.

No. 4 will make at least two more captive flights before making a subsonic tank (lower component) drop over Holloman AFB range.

Following that, the Hustler will undergo "minor modifications" before a final shakedown flight to Kirtland, Team Captain Jim Graham said.

Meanwhile, Hustler No. 38 is scheduled to make a series of air load tests out of Convair FW.

Astro Reservist Will Go to Europe

John S. Berggren, Convair Astronautics program planning administrator (Dept. 150), has been selected for a special staff visit to observe Air Force operations in Europe for a two-week period.

Selection of Berggren and five other Air Force reserve officers was by Gen. Thomas D. White, Air Force chief of staff. The men will visit France, Germany and England.

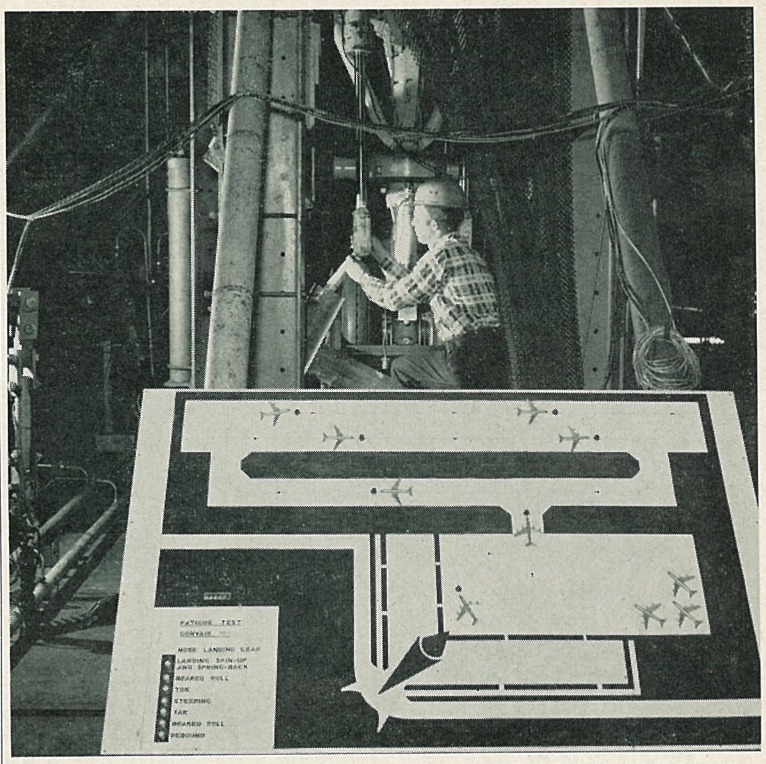
Berggren is a reserve Air Force major assigned to the programs control division assistant for development programming, deputy chief of staff for development headquarters, USAF.

FW's Davis Awarded 'Silver Goal Post'

Convair FW Manager Frank W. Davis received a "Silver Goal Post" award in January from Governor Price Daniel.

The award was made on behalf of "Sports Illustrated" magazine, which named Davis and 24 other prominent business and professional men who were standout senior gridders in 1935 to their silver anniversary team. Davis played for California Tech.

Is It News?
Call Convairiety



MOCK LANDING FIELD—Ken Pauley, Dept. 31 test lab mechanic, makes adjustment on Convair 990 nose landing gear in fixture at SD structures test lab readying it for cycling which will be tracked by lighted positions on display board in foreground.

Flashing Lights Trace Landing Gear Cycles

Flashing lights on a display board, going into use for the first time during tests at Convair SD structures test laboratory, are pinpointing procedure for observers during Convair 990 nose landing gear testing.

Conceived by Don Bowers, SD structures test lab engineer, the board is laid out in the form of a landing field with runways outlined and course of planes plotted by arrows. Tiny planes at significant lighted points lend a realistic touch to the display.

As the nose landing gear goes through the cycle in the fixture, lights come on to indicate seven different conditions: landing, braking, towing, steering, yaw (during taxiing), takeoff brake roll, and rebound (with takeoff load). Each cycle is recorded on an automatic counter on the board.

If testing is interrupted for any reason, the counter will tell test engineers where to pick up the sequence, and the last lighted point will indicate what condition was last recorded.

"The display board, although put up primarily for visual explanation of testing for spectators, will act as a supplementary aid, along with the closed circuit television, for our test engineers during the program," said A. R. Vollmecke, assistant group engineer in charge of the transport test program at the structures test lab. "Of course, all test data is automatically recorded by our data acquisition and interpretation system and the entire test program is controlled by the load programmer in the adjoining control room."

During the 990 landing gear tests, to stretch over the next two or three months, the nose landing gear will be cycling 24 hours a day in fatigue testing. At the same time the main landing gear in an adjacent fixture will be cycling in operational tests. It will go up and down 25,000 times, folding into a plywood box representing the actual wing box on the plane. Only load applied, said F. C. Bader, project engineer on the program, will be an air load to give the same resistance to the gear as if it were airborne on a 990.

Each landing gear will go through both fatigue and operational tests, 25,000 cycles each, before the end of the program this spring.

It's Tight Squeeze as Riveters Enter Pod Through Tiny Opening

D. M. Cooper was dubious but game the first time he tried to enter a B-58 pod through an opening nine inches wide and 12 inches long. In fact, General Foreman R. E. Davis was far more confident than was Cooper.

Since then, however, Cooper has made the entry many times to buck rivets and tighten bolts.

"Never been stuck yet," he announced.

Cooper is 6 feet tall and weighs 145 pounds. He goes in feet first and sucks in his breath at the proper moment.

A score of crewmen at one time or another must enter through the tiny opening in the course of producing a pod, and some are larger men than Cooper. M. T. Buffington, for example, weighs 170 pounds and accomplishes entry with little strain, though you have to see it to believe it.



INSIDE—Believe it or not, D. M. Cooper of FW Dept. 50, enters and leaves B-58 pod through this tiny (nine inches by 12) opening. And he's not a contortionist, either!

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of seven divisions and a Canadian subsidiary, Canadair Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.

Material Service Division, Chicago, Ill., building materials, concrete products and coal.

* * *



DYNAMIC AMERICA — Exhibit in lobby of General Dynamics Building in New York City is three-dimensional presentation of corporate history. Above is one of panels, devoted to Convair aircraft.

New Book Traces Impact Of General Dynamics

NEW YORK CITY — Eighty years of American industrial evolution and the impact that General Dynamics Corporation's commercial and defense products have had upon it are delineated graphically in a unique new exhibit that was opened to the public last month at 1 Rockefeller Plaza, the Corporation's new headquarters.

The exhibit, housed in a 100 by 20-foot display area adjacent to the lobby of the newly renovated General Dynamics Building (formerly the Time-Life Building), is a three-dimensional representation of a just-issued history, "Dynamic America." This 426-page book chronicles eight decades of technological growth and invention by U. S. industry and is published at $20 a copy by Doubleday & Company, Inc.

Scores of photo murals made from illustrations from the book, as well as 50 scale models and specially constructed replicas of the historic submarines, aircraft and early-day flying machines, telephone and electronic equipment, missiles and space vehicles and nuclear devices with which it deals, are on display.

From William Griscom's pioneering fist-sized electric motor and John Philip Holland's first Navy submarine of the turn of the century to the Atlas intercontinental ballistic missile of today and the platforms in space for tomorrow's exploration of other planets, the exhibit places the inventions and accomplishments of General Dynamics' far-flung divisions in the perspectives of their times.

This panorama of industrial progress is portrayed not only with graphic selections from the more than 1,000 illustrations from "Dynamic America" but is carried out as well with accompanying descriptive text, abstracted from the book's 80,000 words and displayed on a waist-high reading ramp that threads the visitor through the exhibit's modular sections.

The exhibit was designed and installed by ENI-International Exhibits of Geneva, Switzerland and Ridgefield, Conn., of which Erik Nitsche is director. This internationally recognized designer, illustrator and art director also was responsible for the graphic layout and typography of "Dynamic America" and supervised its production. The book was edited by John Niven, Courtland Canby and Vernon Welsh.

In addition to the exhibit area adjoining the 30-foot-high lobby entrance to 1 Rockefeller Plaza, General Dynamics now occupies the 27th through 32nd floors of the 36-story building (75,534 square feet) and has an option on the 26th floor.

Designed in modular form, the exhibit will be dismantled after its New York presentation and pertinent units will be distributed among General Dynamics' seven divisions and its Canadian subsidiary for use in technical and industrial exhibits.

★ ★ ★

The keel for USS Lafayette, first of a new class of fleet ballistic missile submarines, was laid at Electric Boat yesterday (Jan. 17).

* * *

Two general interest motion picture films have been released by General Dynamics and are available on request through divisional public relations offices. The first is a 30-minute "General Dynamics Newsreel," capsuling recent activities of the corporation's eight major operating units. The other is a 27-minute film, "Beyond Magellan," telling the story of the round-the-world underseas voyage of the Electric-Boat built submarine Triton. Both films are in color.

* * *

NEWS NOTES — Stromberg-Carlson sound equipment will be used in Washington for the Presidential Inauguration and along the route of the inaugural parade . . . Earl D. Johnson, General Dynamics president, will address the Convair Astronautics Management Club Feb. 25 . . . Sam F. Farmer, division counsel at General Atomic, has been named vice president and counsel for the division . . . General Dynamics Board of Management will meet in New York Jan. 25; the Board of Directors in New York Jan. 26 . . . Material Service has acquired the Gary (Ind.) Lime and Cement Company, building materials dealer and supplier of ready-mixed concrete.

Fierce Fighting

B-24s in Vanguard of Offensives To Neutralize Rabaul and Truk

(Following is installment No. 51 in Convairiety's continuing history of Convair and its aircraft.)

The Pacific campaign developed as a two-pronged offensive. Gen. Douglas MacArthur moving from Australia through New Guinea into the Philippines, while forces under Adm. Chester Nimitz swept north and west from the Solomons to seize the Gilberts, Marshalls, Marianas and Ryukus. Two Japanese strongholds lying between the lines of advance, Rabaul and Truk, were neutralized with repeated air attacks, then by-passed without occupation. Here the Liberators played a major role.

The reduction of Rabaul was accomplished in the fall and winter of 1943. The first large strike by the 5th Air Force was staged Oct. 12. Seven squadrons of B-24s (43rd and 90th Groups) struck from Port Moresby, New Guinea, along with waves of P-38 fighters and B-25 medium bombers. The base was hampered incessantly for the next four months in the face of savage interception and fierce anti-aircraft fire. Liberator gunners had their hands full. The "Army Air Forces in World War II" relates:

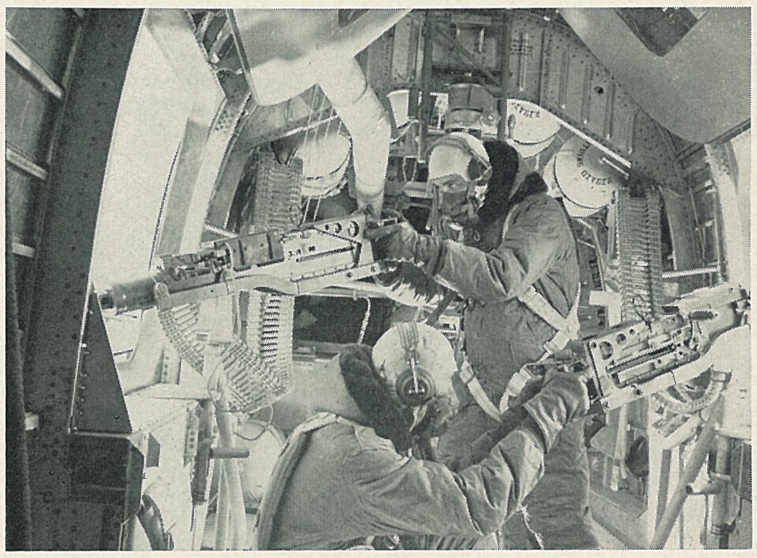
"One plane in the last squadron, the 403rd, was badly damaged and promptly set upon by Japanese fighters. Two bombers, dropping back to box it in for protection, shot down eight enemy planes before they had to pull off. Then, for 15 minutes, the Japanese lined up to make their passes, but the planes still flew. Not until after the enemy had given up did the two remaining engines cut out and the plane break up after ditching. The pilot and copilot were trapped, but eight of the crew got out and were picked up by a Catalina."

Pounded continuously through the early months of 1944, Rabaul by mid-February was virtually eliminated as an enemy air center.

Truk became the No. 1 target of the 5th and the 13th AF heavies from March to September, 1944. The first strike was staged from the Gilberts, March 14-15 by the 30th Bombardment Group (Col. Edwin B. Miller). The 38th Squadron flew up from Makin and the 392nd from Apamama, staging at Kwajalein, where each plane took on six 500-lb. bombs and 3,150 gallons of gasoline. Arriving over Truk at night after a 1,096-mile flight, the Liberators met little resistance (the first wave found all lights turned on) and scored heavily on hangars, a seaplane base and a tank farm. For the 392nd Squadron, whose home field was the farthest removed, this one mission required a total flight of 4,255 miles.

The raid was the first land-based attack on Truk and brought the 30th a series of commendations. A few weeks later another B-24 outfit won a Presidential Unit Citation for bringing off the first daytime strike against Truk. The assault was conducted March 29 by the 307th Group (Squadrons 370 and 424), flying from Munda with staging stops at Torokina and Nissan. The bomb pattern "walked across the target" despite heavy anti-aircraft fire. Afterward the Liberators fought off an estimated 75 fighters in a 45-minute running battle. Two bombers were lost. Casualties totaled 10 dead, 10 missing and 11 wounded.

While the attacks on Truk continued, 7th AF Liberators teamed with Navy PB4Y-1 photo planes April 18 for the first land-based raid on Saipan, in preparation for the invasion June 15. After Saipan and Guam were secured, the 7th moved forward to the Marianas but kept an eye on Truk until mid-1945, periodically dropping bombs on its battered airfields and seadromes.



DEFENSE—B-24 Liberators were not without their defense for attacking fighters. This was posed picture, but shows gun stations from which crewmen often fought off attack.

Vacations Pay For SD Collector Who 'Trades' Way State to State

Money, or the lack of it, is no problem for Convair SD's Walter Wilson when vacation time rolls around. The way he does it the vacations pay for themselves!

Instead of stuffing his wallet with greenbacks, he fills a box with a selected assortment of Indian relics and trades his way from one state to another.

"That's right," says Wilson, who is at San Diego in Dept. 31. "During my vacation I usually travel in different areas of the country and build up my collection of Indian relics. It usually works out that I have an all-expense-paid vacation."

Wilson stocks up on items that are scarce in certain parts of the country. When he hits that locale he's in an excellent position to make a good trade or sale for himself.

"You would probably be amazed at the number of persons who are interested in collecting Indian relics. Many have an over-supply of one article or another and they are more than happy to make a deal for something they don't have," says Wilson.

As an example of how the trading arrangement can work, Wilson cites some rings with turquoise settings he bought on an Indian reservation in Arizona. Wilson purchased a batch of "seconds" (flaws in workmanship, chipped stones) for under $1 each, sold them in other parts of the country at $5 and $6.

At home Wilson has a collection of Indian relics which he values at about $1,500. Unlike many collectors he doesn't concentrate on a specialty but handles anything and everything: from spears, knives and arrowheads to baskets, pottery and Indian jewelry.

How did he go about collecting such a bewildering variety of relics?

"It's like a rolling snowball getting bigger all the time," answers Wilson. "One collector gives you the name of another, acquaintances pass along tips about an item that may be of interest. As a matter of fact, right now I have the names of 12 persons to contact who may well possess or know of some interesting collector's item."

In his "bookcase museum," which fills up a corner of his living room, row after row of relics line the shelves. Wilson claims he's lost count as to the total number in his possession, but his memory opens like an encyclopedia if he's asked about the tradition or history of any particular object.

"For instance, not many people know that the Indians topped their flags with ornaments," he said, picking up a dark, bird-shaped stone. "Some experts argue that our present American eagle is actually patterned after their idea."

Strictly speaking, Wilson's collection is not confined to the Indian era.

Wilson pointed to a blunted stone knife his four-year-old grandson was holding. "That's at least 2,000 years old," he claimed.



SUCCESSFUL SEARCH — Result of many hours of spare-time search and travel is Indian relic collection of Convair SD's Walter Wilson. Many items date back to "Stone Age." With Wilson is his four-year-old grandson.

Tough, Rough Ride Forecast For Jeep Jaunt in February

"We followed our radiator caps right through the roughest part of the mountains to plot the toughest course we possibly could.

"It took 5½ hours to go six miles, and 45 minutes to climb 120 feet up one hill. We can promise the ruggedest trip ever held."

That's how the trail route for the fourth annual Rough Riders jeep jaunt was laid out, according to Art Thomas, cruise leader.

Co-sponsored by the SD County Ridgerunners and the CRA Jeep Club, the Rough Riders trek will be held Feb. 4 and 5. It will be open to all Southern California owners of four-wheel drive vehicles, with a special invitation extended to Convair SD and Astro drivers.

Traditionally a test of endurance, more than 100 jeeps are expected to join the caravan. Riders will assemble Friday night at Truck Haven on Hwy. 99, north of Salton Sea Riviera. Departure will be the next morning (Feb. 4) at 8 a.m. sharp.

Though the route covers only 11 miles, extra gas, water and tow chain will be needed. Jeeps will head west into the desert, swing up to the Santa Rosa Mts. to Four Palm Springs oasis, then travel to McCurran Springs for overnight camp.

Because of the rugged terrain, clay hills and shifting sand, travelers should be prepared to dig their way out if necessary. All equipment and anything else carried in the vehicle will have to be tied down, said Thomas.

The following precautions will be taken. In case of breakdown, vehicles will be towed to nearest road (Hwy. 99). Spare parts will be carried for minor repairs.

In case of accident or injury a Cessna 182 will be stationed at Salton Sea airport to fly injured out. Throughout the trip the caravan will be in constant radio contact with their base on Palomar Mt. which will be manned by a radio operator who will be in touch with San Diego.

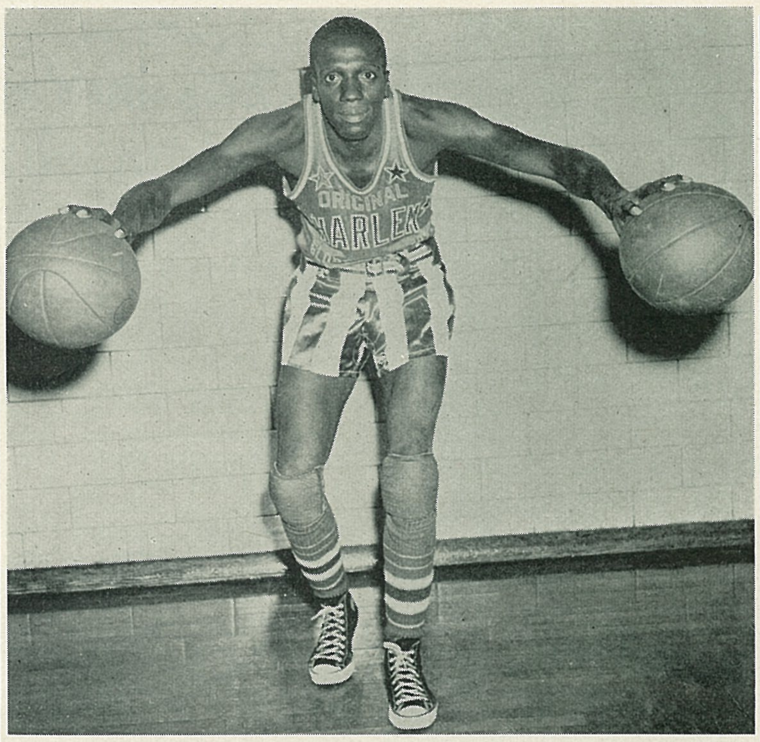
Only charge for the trip will be a $2 donation from each person, which will go to the San Diego Rescue group. For more information, call Thomas between 5 and 6 p.m., HI-8-1602.

Garden Club Plans Rose Show in April

April 9 has been set as the date for the annual Convair SD Garden Club Rose Show. It will be held in the Floral Association Bldg., Balboa Park.

Garden Club members and other Convair rose growers are reminded that the time is here for pruning roses so they will be in bloom when show time rolls around.

The Garden Club elected a new president this month. He is Henry Boyd (Dept. 31). Publicity chairman for the group is Everett Henderson. Office of recording secretary will be filled at a later date.



COMEDY KING—"Meadowlark" Lemon, famed comic, court clown and cager extraordinary, will be one of stars of all-Convair matinee (2:30 p.m.) Jan. 28 at Westgate Park featuring Harlem Globetrotters. Tickets are now on sale at Astronautics and Convair San Diego.

Globetrotters Slated For Convair Matinee; Tickets at Half Price

The world-famed Harlem Globetrotters, with musician Cab Calloway as an added attraction, will perform at a special all-Convair matinee Saturday, Jan. 28, at 2:30 p. m. at Westgate Park.

Through sponsorship of CRA at both Astronautics and San Diego, employees will be able to purchase tickets at exactly one-half the normal price.

Ducats selling for $1.50, $1.25 and $1 went on sale at employee services at both plants Monday (Jan. 16). They are being offered on a first-come, first-served basis.

As the current season got under way the Globetrotters had put together a string of 6,784 victories against 303 defeats, playing in all corners of the globe. Again this year they feature a dazzling array of cage stars who are known as much for their ability to win as their comic antics on the court. The Washington (D.C.) Generals, a professional team, will supply the opposition.

Cab Calloway, "Mr. Hi-De-Ho," is emcee of the accompanying show which includes Les Marthys of Paris, an acrobatic group, and the Parry Kids on the trampoline as well as other acts. Sharing the show's spotlight will be four world-famous table tennis stars currently engaged in a singles tournament for $21,000 in cash.

Convair Golf Club Schedule Set for 1961

Convair Golf Club, open to both Convair San Diego and Astronautics employees, this week announced a full schedule of events for the coming year.

All events are open to club members only. Memberships are now available for 1961 through: Bob Lea, ext. 3891; C. B. Bagaloff, ext. 1261, and Dick Tobias, ext. 1631 at Astronautics. Curley Maxfield, ext. 694 and Jake Moore, ext. 1230 at SD Plant 1. Bob Longino, ext. 43 at Sycamore Canyon, and Hal Napier, ext. 376 at Plant 2.

The 1961 schedule includes:

Jan. 21-22, sweepstakes at Caliente.

Feb. 25-26, sweepstakes at Coronado.

March 25-26, sweepstakes at Circle R.

April 29-30, sweepstakes at El Camino.

May is reserved for Industrial Tournament.

June 11-18-24-25 Club Championship (match play) at Flying Hills.

July 22-23, sweepstakes at Caliente.

Aug. 26-27, sweepstakes at El Camino.

Sept. reserved for Astronautics and SD Championships.

Oct. 21-22, sweepstakes at Circle R.

Nov. 18-19, sweepstakes at Bonita.

Dec. 9-10, sweepstakes at Torrey Pines.

Toastmasters Meet Jan. 23

"The World We Live In" will be the theme of next week's (Jan. 23) session of Convair Toastmasters Club No. 457.

All SD and Astro men, interested in the speaking group, are welcome at the 6 o'clock dinner meetings held Monday evenings in the executive dining room of the Convair SD cafeteria on Pacific Hwy. There are openings now for a few Convair men to bring the club up to its full membership complement, said Don Quinn, publicity chairman.

Plans are under way for exchange meetings with other Toastmaster Clubs in the area to give members an opportunity to speak before other audiences and to hear other club speakers. First exchange meeting is being planned for next month.

Any interested Convair SD and Astro men are urged to call Quinn, ext. 1264; or the club's president, Andrew Gormish, ext. 2273, both at SD Plant 1.

SD, Astro Ice Skaters Plan Winter Weekend at Big Bear

Convair SD Ice Skating Club and Astro Blades will co-sponsor a winter weekend at Big Bear Lake Feb. 17-19.

Reservations must be made by Feb. 5 with Martha Woodberry, SD ext. 1245; or Bud Davies, Astro ext. 3441, CRA commissioners. Ticket supply is limited, and no cancellations will be accepted after the deadline date.

A special "package deal" has been arranged with two nights' lodging at Wawona Lodge, breakfasts, and a Saturday night barbecue dinner, all for $10 per person. Lodging only is $4 per person, per night, with a two-night minimum due to peak season demand.

Wawona Lodge includes rooms for two to five persons, housekeeping cabins with accommodations for four, a central lounge, recreation room, and a large commercial-type kitchen. Room assignments will be made on a first-come, first-served basis.

Weekend activities will include skating, tobogganing, and skiing climaxed by a barbecue and midnight pizza snack on Saturday, with a private ice skating session slated for Sunday forenoon.

Transportation to Big Bear will be by private conveyance. However, a ride coordinator will be designated if demand warrants.

In San Diego, the clubs hold weekly ice skating sessions at Iceland, 6055 Lake Murray Blvd., each Thursday from 6:30 to 8 p.m. Free instruction for dancing, intermediate and beginning skaters is provided and enthusiasts may use the rink with the public until 10 p.m. at no additional cost, after club skating is concluded.

INSPECTORS PLAN REUNION JAN. 22

Annual reunion of the Convair quality control inspectors class of 1941 has been set for 7 p.m. Jan. 22 at Clairemont Bowl dining room.

This group originally consisted of 35 men who attended a special class in quality control. They get together once each year for a social affair and to talk over old times.

Current membership is 14, with 12 of those still on Convair payrolls at Convair San Diego or Astronautics. Members include P. L. Akins, D. R. Archibald, C. E. Brown, L. D. Buckmaster, E. G. Callard, E. E. Chavez, H. S. Morgan, Y. E. Naliboff, D. M. Wagner, J. R. Padifield, H. L. Sack, R. Sanchez, E. D. Seaburg and K. L. Sullivan.

Cafeteria Workers Attend Food Class

A week-long food sanitation class attended by all Prophet Company employees working at Convair San Diego and Astronautics cafeterias wound up yesterday (Jan. 17).

Offered by the San Diego Health Department, the class included the latest methods of proper and sanitary handling, preparation and serving of food. Prophet Company employees attended on their own time.

Is It News?

Call Convairiety

Mgt. Club Keg Tourneys Set

Management Club members at San Diego and Astronautics are invited to participate in two top National Management Association bowling tournaments to be held in San Diego in February and March.

The NMA Telegraphic Tournament will be held at Clairemont Bowl on Feb. 26. As in the past, it will give local keglers an opportunity to match pin totals with NMA members throughout the country.

Clairemont Bowl will also be the setting March 18 and 19 for the 13th annual NMA Area Bowling Tournament. A number of cash prizes, including $1,000 for a perfect game, will be offered during the two-day tourney.

Interested Management Club keglers at Astro may call Forrest Erwin, ext. 1261, for additional information. Coordinator at Convair SD is Harry Lund, ext. 1241, Plant 1.

Badminton Tourney Set for March

Astronautics CRA Badminton Club will hold its Fourth Annual Tournament March 4 and 5 in the Federal Bldg., Balboa Park.

The tournament will include all men's and women's divisions, and mixed doubles. It is open to both Astro and Convair SD players.

Trophies will be awarded in all divisions. Prospective entrants may obtain additional information by contacting Les Marr, CRA commissioner at Astro, ext. 1780.

The club holds regular play nights on Tuesdays from 7 to 10 p.m. in the Federal Bldg.

Next Week Start For Charm Course

There are a limited number of openings still available to Convair SD women in the new charm course to start next week (Jan. 25), according to Martha Woodberry, CRA commissioner of women's activities.

Registration will be taken at Plant 1 employee services in Bldg. 32 until date of the first session. Entire cost of the six-week course, to be paid at time of registration, is $8.50 each.

Classes will be held Wednesday nights from 7-9 p.m. in the executive dining room, Convair cafeteria on Pacific Hwy. Instructor of the CRA-sponsored course is Edith Antelline, SD charm school director.

Course in Russian Offered Employees

Anna Ney, wife of an Astronautics engineer, is now set to teach a new class in "Conversational Russian" open to all Convair San Diego and Astronautics employees.

To be offered as part of San Diego's adult education program, the class would open Jan. 31 at La Jolla High School. There is no charge.

Convair employees interested in attending are invited to contact Mrs. Ney at GL-4-2001, or the Northwest Adult High School at BR-3-9385 to register in advance.

Bern Swarts Prexy Of SD Rockhounds

Newly-elected officers of Convair SD Rockhound Club presided at their first meeting on Jan. 12, according to Danny Whorton, CRA commissioner.

On the new slate are Bern Swarts (Dept. 190-0), president; Jim Sugg (Dept. 188-5), vice president; Mrs. Dorcus Utter (wife of Arley Utter, Dept. 119), secretary; and Mrs. Margaret Dunivan (wife of Fred Dunivan, Dept. 31), treasurer.

Rockhounds holding positions on the club's board of control are Gerald Heslop (Dept. 31), Joseph Rogers (Dept. 171), Arley Utter, Edmund Wawrzynski (Dept. 401-6) and his wife, Regina, Desse Whitman (Dept. 401-0), and Virginia Forbes, wife of past president George Forbes (Dept. 188-3).

Archers Start New System for Awards

A new awards program for class winners at Convair SD Archery Club shoots has been announced by Al Phipps, club spokesman.

Under the new program, which started with the Jan. 8 shoot, archers now have their choice of winning either arrows or medals. In addition, special "bonus" arrows are being given for attendance at shoots and meetings.

The new awards arrangement will be one of the topics of discussion at an Archery Club meeting tomorrow night (Jan. 19) at 7:30 p.m. in the CRA Clubhouse on Pacific Hwy.

Song Group Needs More New Voices

Reorganization of the Convair SD Choralaires is continuing and an invitation for new members to join the choral group is still open.

W. A. Vogel, director, said all parts (soprano, alto, tenor, bass) are welcome. Regular rehearsals are being held each Monday evening at 7:30 in the CRA Clubhouse, Pacific Hwy.

Membership in the choral group is open to all interested Convair employees and family members. Singing experience is not required, though helpful. First public appearances of the group will be held some time in spring.

Saturday Schedule For Salvage Yards

Employees salvage store at Convair San Diego will be open this Saturday (Jan. 21) and Feb. 4 from 7:30 a.m. until noon.

On alternate Saturdays, Jan. 28 and Feb. 11, the Astronautics salvage yard will be open to employees from 8 a.m. until noon.

CRA Sports & Recreation Convairiety

Riding Club Will Host Horse Show on Sunday

An open Horse Show and Gymkhana, expected to attract at least 200 entries, will be hosted and conducted by Convair SD Riding Club this Sunday (Jan. 22).

The show's first event, the open bareback horsemanship class, will start promptly at 9 a.m. at the Clover Leaf Stables (near the traffic circle of Hwy. 80 and Hwy. 395).

Spectators, who are invited to witness proceedings free, will see events about equally divided between juniors and seniors with 17 classes extending throughout the day.

V. V. Thomason, Riding Club president, said classes will include western equitation, western open, children's jumpers, open hunters and jumpers, color classes, and gymkhana events such as Texas barrel race and keyhole race. The fun class will wind up doings with the popular rider pickup event against time.

Added attraction during the noon intermission will be an exhibition by the Purple Sage Riders, an 11-girl mounted drill team, headed by Miss "Andy" Anderson and sponsored by the El Cajon Lions Club.

Show entries will be accepted until shortly before the start of each class. Ladies of the Riding Club will prepare and serve food throughout the day. Additional information can be obtained by calling Thomason, ext. 1047, Plant 1.

CRA Spanish Class Starts Next Tuesday

Another opportunity for beginners at Convair SD to enroll in a free "Conversational Spanish" course will be given next Tuesday (Jan. 24).

Registrations will be accepted on that date, starting at 7 p.m., in Room 5 of the Balboa Park Conference Bldg. Classes will be held at the same location each Tuesday evening between 7 and 9:30 p.m.

The Spanish classes, which are sponsored by CRA, have proven to be highly successful, with upwards of 20 persons enrolled in each of the classes held so far. Instructor is J. M. Hardison (Dept. 15).

Emphasis is placed on giving students a fast familiarity with the language so they will be actually able to speak Spanish and carry on a simple conversation in a relatively short time. Type of Spanish taught is the same as that used each day on the Mexican radio and television.

Those who feel they already have some proficiency in the language are invited to attend the intermediate and advanced class which meets Thursdays, also between 7 and 9:30 p.m. in the Balboa Park Conference Bldg.

Additional information concerning classes can be obtained by calling Hardison, ext. 2838, Plant 1.

Close Contests At Pistol Shoot

At pistol shoots "X" literally "marks the spot," separating winners from runners-up in case of a tie score.

At the Jan. 8 Convair SD Pistol Club shoot the "X" ring twice broke ties which developed in the .22 caliber short national match event, according to Ash Bishop, CRA commissioner.

Places broke down as follows: Joe Williamson (Dept. 401-5), first, 279 points with six "X"s; B. L. Broadway (Dept. 115), second, 279 points with five "X"s; R. E. Kezar (Dept. 6), 278 points with six "X"s; Carl Hornburg (Dept. 139), 278 points with three "X"s.

(The "X" scoring ring on the target is a smaller circle inside the "bull's eye" and is used only to break ties as it helps determine which shooter had the greatest number of shots closest to the center of the target.)

Winner of the police course master class at the same Sunday shoot was Broadway with 293 points, followed by Jim Halfacre (Dept. 180) with 289. In the expert class Hornburg placed first with 285 points and Ralph Picard (Dept. 7) was second with 281. First and second in the sharpshooter category went to A. B. Carlson (Dept. 68) and Harvey Ingalls (Dept. 6) with scores of 268 and 260.

Grantham New Fishing Prexy

President Glenn Grantham heads a new slate of officers elected last month by Convair SD Fishing Club. He was also appointed club delegate to the San Diego County Wildlife Federation.

Others taking over club duties included Linda Menzie (daughter of R. W. Menzie, CRA commissioner), secretary; Joe Sopko, chairman of entertainment committee; L. R. Davidson, retired employees committee; Warren Bowen, contest committee.

Hostesses in charge of refreshments at club activities will include Mrs. Grantham, Mrs. Menzie, Mrs. Sopko and Mrs. Guy Hymes.

Next club meeting will be held tonight (Jan. 18) at 7 p.m. in the executive dining room of the new Convair cafeteria. Main topic of discussion will be the Father-Son Fishing Trip which is tentatively scheduled down the Colorado River some time in February.

Possibly, a trip to the Colorado River will be arranged this weekend (Jan. 21-22-23) so that the preliminary arrangements can be made for the Father-Son junket. For additional information, call Menzie, after 5 p.m., at AT-1-8247.

Winner of the $10 December Fishing Contest award was Mike Alianelli who caught a 17-and-¼-inch trout in Murray Lake.

Discount Offered For Sportfishing

Discount tickets for sportfishing trips are on hand at Convair SD employee services, Plant 1, for SD fishing enthusiasts.

With the tickets, regular $5.50 half-day trips may be taken for $3.85 on boats of either Mission Bay Sportfishing or Seaforth Landing Sportfishing. Reservations are necessary.

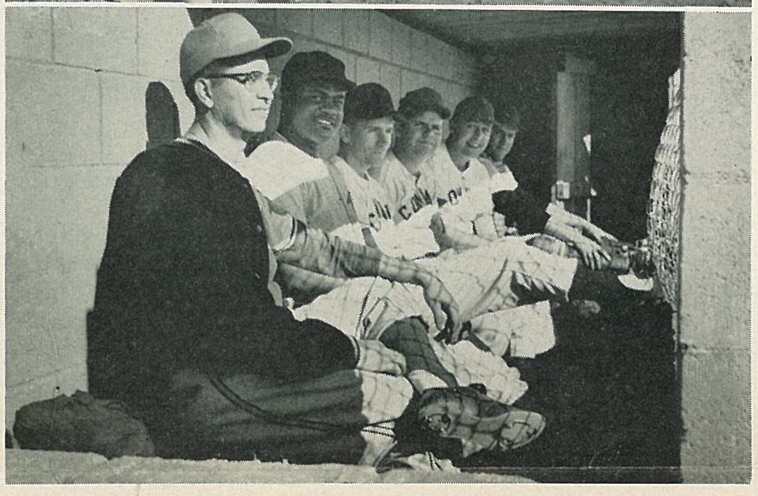
Hunting Film Set For Special Show

All interested Convair persons are invited to attend a special screening of a 45-minute, color film taken on a hunting trip in Idaho.

Arrangements for the showing have been made by Convair archer Roger Redden. Of interest to both hunters and wildlife enthusiasts it will be screened Friday (Jan. 27) at 7:30 p. m. in the Balboa Park Conference Bldg.







LEAGUE LEADERS—Convair SD's baseball entry in city American League last week was on top standings with three wins, no losses. Above photos were taken when second-round leaders played Astronautics Jan. 8. Pitcher, manager and catcher in top photo are Eddie Moraga, Pete Beyrer and Bobby Steel. Center shot shows Convair SD shortstop Ben Macias dashing back into first base as Astro's Deacon Jones covers bag. Macias was safe, Convair SD won game 10-5. SD players in dugout are (from left) Moraga, George Cooper, Dick Fenton, John Hartsell, Bill Murphy and Steel.

Reservations Open for Sweeps Slated Feb. 4-5 at Circle R

Reservations for the second CRA golf sweepstakes of 1961 are now being taken at ext. 1705, Plant 1.

Last day for getting starting times will be Jan. 27. The sweeps will be played Feb. 4-5 at Circle R.

CRA golf activity for 1961 got off to a flying start at Flying Hills Jan. 7-8 with no less than 147 linksmen matching strokes.

Only one stroke separated first and second low gross in the 0-14 handicap group. Wayne Hines (Dept. 180) led the way with a 78, followed by Dick Ramsdell's (Dept. 267) 79. Low nets of 70 and 71 placed first and second for J. F. Silva (Dept. 400) and Gene Villegas (Dept. 31).

In the 15-20 handicap group, Jim Ensign (Dept. 15) led the low gross group with a 79. Second was Will Weidenfeller (Dept. 3) with 85. Bob Stegall's (Dept. 15) 66 was good for first low net; Bob Lucia (Dept. 110) was second with 69.

Low gross leaders in the third handicap group were Sam Graves (Dept. 401) with 88 and Charles Constantino (Dept. 400) with 93. Low netters were Joe Santone (Dept. 400) with 60 and Russ Baker (Dept. 6) with 67.

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Play in Two Events Required To Qualify For Golf Team

(It is suggested that Convair SD golfers clip this schedule for future reference.)

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Jan. 7-8, CRA sweepstakes, Flying Hills (see note).

Feb. 4-5, CRA sweepstakes, Circle R.

March 4-5, CRA sweepstakes, Caliente.

April 1-2, 8-9, Yater Memorial, Coronado and Flying Hills.

May: reserved for Industrial Recreation Association championships.

June: Convair Golf Club championship.

July 8-9, CRA sweepstakes, Flying Hills.

Aug. 5-6, CRA sweepstakes, Coronado.

Sept. 9-16-23, annual 54-hole, CRA match play championship, Circle R.

Oct. 7-8, CRA sweepstakes, El Camino.

Nov. 4-5, CRA sweepstakes, Coronado.

Dec. 2-3, CRA sweepstakes, Circle R.

Note: CRA-SD players must compete in two of first three (January, February, March) tournaments to qualify for Convair inter-plant matches tentatively scheduled in May and June. It is also required that golfers play in at least three of the monthly tournaments during 1961 to compete in the plant championship event in September.

Quarterly Contest For Camera Club Set Next Monday

Convair SD Camera Club will hold its first quarterly photo contest of the new year next Monday (Jan. 23) at 7:30 p.m. in the Photo Arts Bldg., Balboa Park.

Entries are encouraged from all Convair SD camera fans. No prior registration is necessary to enter the contest, but additional information can be obtained by calling CRA Commissioner C. E. Schultz, ext. 289, Plant 2, or JU-2-6787.

Selection of the top print and color slide of the year was made at a meeting Jan. 9.

Winding up with the "Print of the Year" award was club member Ron Ainsworth with a striking shot of a spider spinning its web. Commissioner C. E. Schultz took the color slide award with a scenic shot taken at Bryce National Park.

Both of the winning club entries will now be entered in the "Tops of the Year" contest sponsored by the Southern California Association of Camera Clubs.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

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ARCHERY — Meeting Jan. 19, 7:30 p.m., CRA Clubhouse, Pacific Hwy. Hunting film to be shown at special session Friday (Jan. 27) in Conference Bldg., Balboa Park.

BRIDGE CLUB—Next session Jan. 31, 7:30 p.m., Hotel Barcelona, 326 Juniper St.

CAMERA CLUB—First quarterly contest at meeting next Monday (Jan. 23), 7:30 p.m., Photo Arts Bldg., Balboa Park.

CHORALAIRES — New members invited. Rehearsals held Monday evenings, 7:30 p.m., CRA Clubhouse, Pacific Hwy.

FENCING — Workouts and instruction every Friday, 7:30 to 9:30 p.m., YWCA, 10th and C St.

FISHING CLUB—Meeting tonight (Jan. 18), 7 p.m., executive dining room, new Convair cafeteria.

GOLF — Reservations open for CRA sweeps Feb. 4-5 at Circle R. Call ext. 1705, Plant 1; deadline is Jan. 27.

JUDO—Workouts and instruction every Thursday in CRA Clubhouse on Pacific Hwy., 6-7:30 p.m.

JEEP CLUB — Fourth annual Rough Riders desert trip Feb. 4-5. Jeepsters meet Friday night at Truck Haven on Hwy. 99, leave Feb. 4 morning at 8.

MOVIES—Reduced-price movies Fridays, Saturdays and Sundays at Adams Theater, 3325 Adams Ave. Adults: 50¢; children under 12 free, if accompanied by adult.

PISTOL CLUB — Next shoot Jan. 22, San Diego Police Pistol Range, 9:30 a.m.

RADIO CLUB — Meeting tomorrow (Jan. 19), 7:30 p.m., Harbor Drive headquarters. Code and operating procedures class starts 7 p.m., Jan. 31 at headquarters.

RIDING CLUB — Horse Show Jan. 22, 9 a.m., Clover Leaf Stables, Mission Valley. Spectators invited.

SPANISH CLASS—New beginners class starts Tuesday (Jan. 24), 7-9 p.m., Room 5, Conference Bldg., Balboa Park. Open without charge to all Convair SD persons and family members. Intermediate and advanced class held Thursdays, same time and place; new registrations will be accepted Jan. 26.

SPORTS CAR CLUB—Meeting Wednesday (Feb. 1), 7:30 p.m., Museum of Natural History, Balboa Park. Entries being accepted for fourth annual "Seat of the Pants" rally Feb. 12.

WOMEN'S ACTIVITIES — A few openings still available for new charm course to start next week (Jan. 25). Classes Wednesday nights, 7-9 p.m., in executive dining room, Convair cafeteria on Pacific Hwy.

Model Dips and Dives On San Diego Roof Top Testing 990 Antennas

A copper-sprayed wooden model of the Convair 990 is revolving on the roof of Bldg. 51 at Convair San Diego Plant 1 as performance testing of antennas by the SD electronics antenna group gets under way.

For the next three months, the 1/20th scale model with a wing span of six feet, can be seen daily, barring rain or heavy fog, as it turns on the 15-ft. boom receiving signals from the transmitting horn 50 feet away.

Only nine antennas of the 15 on the newest Convair jetliner need be checked out to prove their performance for FAA certification. These are communication and navigation antennas, either flush or blade-type, which have been moved to slightly different locations from those on the 880, explained M. M. Chazotte, responsible for the transport antenna program. Also, due to differences in the 990 configuration, such as installation of larger engine nacelles and anti-shock bodies on the wings, which change the antenna pattern, new tests must be made with those antenna which might be affected, he said.

Tiny simulated antennas, from one-fifth to just under an inch high, are placed on the scaled model. Five are fastened to a brass plate on the bottom of the model. On the top of the plane one is in the fairing near center, two forward of the fairing, and one in the vertical stabilizer.

Transmitted signals picked up from the antenna range source go through a test antenna to a detector inside the model, thence to a recorder within the control building, and are automatically traced on a polar recorder. The test model is tilted at every possible angle during data gathering. A full set of 36 conical patterns is needed to sample and record a spherical pattern around a craft.

Information recorded during the antenna tests will be submitted to the FAA for final antenna certification this spring before electronics certification flights. Laboratory antenna testing substantially cuts time and expense of airborne testing.



ROOF-TOP RANGE—D. W. Hunnicutt of Convair SD electronics antenna group readies equipment at antenna range in tests of Convair 990 antennas on model revolving on boom 50 feet away atop Bldg. 51 at Plant 1.



INSTANT DATA—L. H. Brewer, activation services supervisor, looks on as Sybil Andrews operates Data-Fax facsimile equipment now linking Astro with Warren AFB. Machine transmits exact duplicate of "A"-size drawing in six minutes.

Copies of Blueprints, Drawings Sent by Phone Wire to Astro

Quicker than you can take a "coffee break," Convair Astronautics is transmitting exact copies of such items as drawings, engineering orders, etc., across the 1,058 miles to Warren AFB, Wyo.

Astro is trying out a new facsimile transmitting system called Data-Fax to determine its capabilities in assisting with speedy activation of Atlas missile bases.

The present system consists of a transmitter and receiver located in Astro's materials building and similar equipment at Astro's Warren AFB headquarters. A direct-line leased telephone wire connects the two.

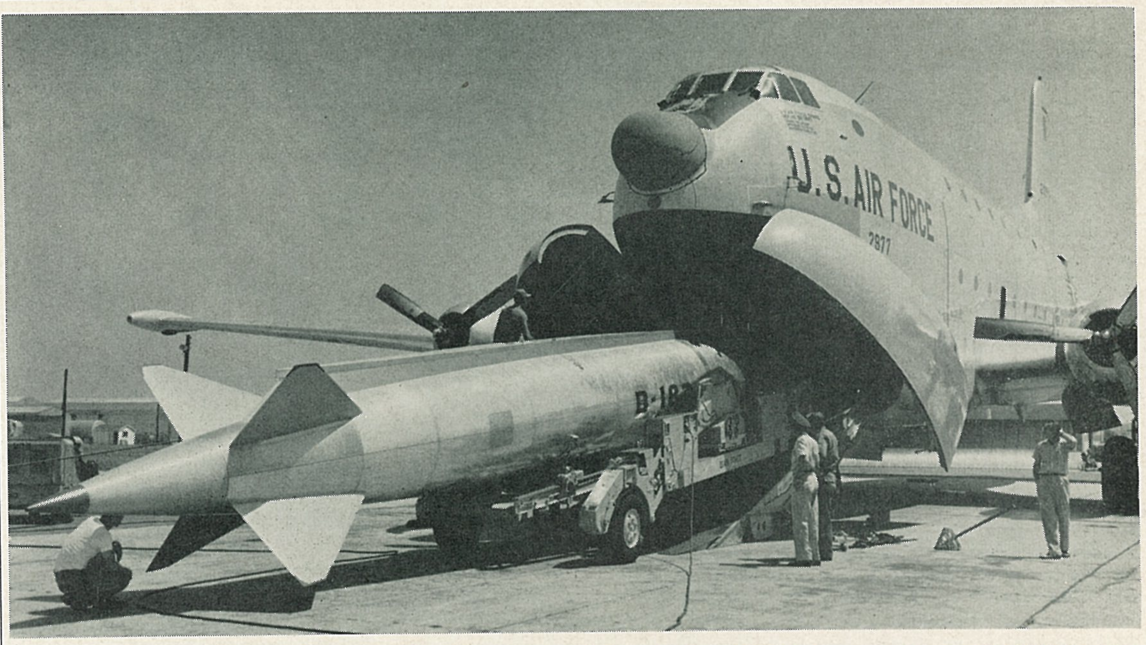
Items now being sent include such things as exact copies of unclassified engineering orders, schematics, "A"-size blueprints and certain work authorizations requiring signatures.

Width of material to be sent is restricted to about 8½ inches, although there is no limitation on length.

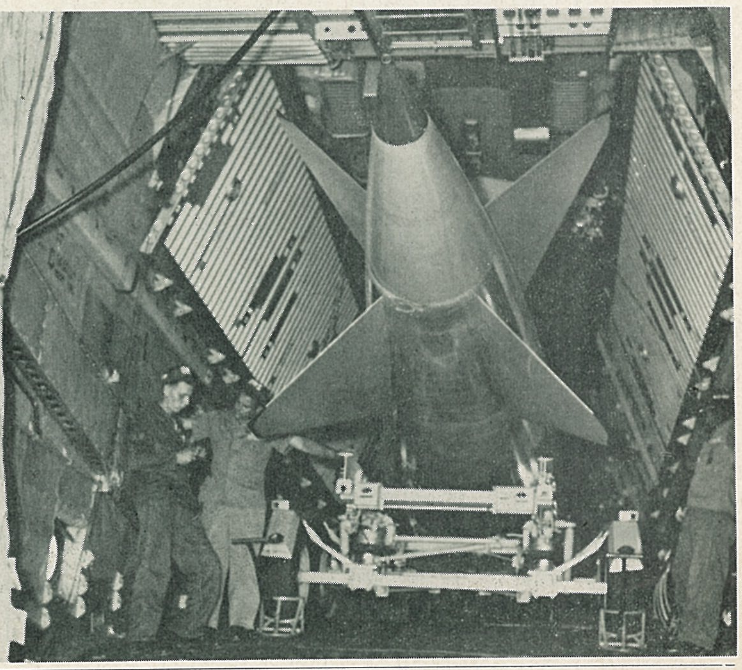
Before the system was pressed into use, Astro filled requests for exact copies by having the original reproduced, then packaged and shipped via conventional means.

Now a full page can be sent and an exact duplicate in reproducible form obtained in about six minutes.

Astro's base activation services (Dept. 606) operates the facility.



AIRLIFT—B-58 MB pod on positioning trailer (above) is guided into open jaws of C-124 transport in simulated loading for flight. Up and in, pod fits comfortably in plane's cavernous interior (below).



Airlifted Pod Ups Flexibility Of B-58 Hustler

Ability to airlift B-58 pods anywhere in the world adds depth to the Hustler's versatility.

Recent loading tests by Air Force at Carswell AFB proved that B-58 pods could be carried with relative ease in the "belly" of a C-124 transport.

"The Air Force has demonstrated that an MB pod loaded on both positioning and transport trailer could be loaded successfully on the big cargo plane—either tail-first or nose-first," said J. K. Jopling, senior design engineer.

Jopling said that tie-down methods are yet to be tested, but indicated that in an emergency a pod could be airlifted at once.

An airlift capability for the Hustler's MB and two-component pods would give the B-58 even greater intercontinental flexibility, Jopling pointed out.

"Pods can be airlifted to auxiliary bases at any point in the world. A mission originating from the Hustler's home base could be completed, then a secondary mission could be originated from the auxiliary base using the airlifted pod."

(The B-58's new two-component pod is a pod-within-a-pod; the upper component carries the payload, while the lower component carries only fuel. The lower pod is jettisoned after its fuel is used.)

Jopling said that loading a B-58 pod has "routinely" taken less than 40 minutes.

Skunk Gets Chilly Welcome at Astro

An "unauthorized visitor" received "cool" treatment at Convair Astronautics last week, but not before causing a mass evacuation for a short period.

Over the weekend a skunk set up quarters in the low bay area of the factory. When maintenance personnel urged his departure, he responded in his own fashion.

Lt. Charles Brown, Herschel Preston and James Baker of the fire department took charge. A few blasts from a "CO2" bottle (110 degrees below zero) "froze" the intruder long enough for his removal to freedom outside the main security area. He was unhurt.

New Stand Designed For Testing Fuel System of Hustler's Pod

Convair FW engineers have developed a 100,000-pound capacity steel stand for testing the B-58 pod fuel system and components.

The stand enables Hustler crewmen to fuel a pod and check it for leaks without "loading" it on a Hustler.

"A pod can't be filled with fuel unless it's on the plane—or the tester—because it can't support itself on cradles when fully fueled," explained design engineer R. B. Cameron.

The first pod test stand was built at FW and installed at Carswell AFB. It's built of structural steel beams 18 feet long, 12 feet across and 10 feet high, and anchored in concrete.

"It simulates B-58 fuel disconnects, hook fittings and electrical systems," Cameron added.

"A pod is moved into position on either a positioning or loading trailer, which is removed when the pod is hooked onto the tester."

Fuel is pumped into the pod along with pressurized air, regulated to five pounds per square inch. This simulates flight conditions and reveals leaks more easily, Cameron pointed out.

For a complete fuel test, the pod is left hanging in the tester for about 24 hours.

Various components are tested through an electrical control panel on the stand.

"We're working on a new version of the tester, which should be ready within the next few months," Cameron said.

The new tester will be about 15 feet wide and nine feet tall (enabling the pod to be put in a nose-up attitude). It will also have other "minor refinements."

And something new is being added: a simulated pod upper component, to be used in testing the lower component.

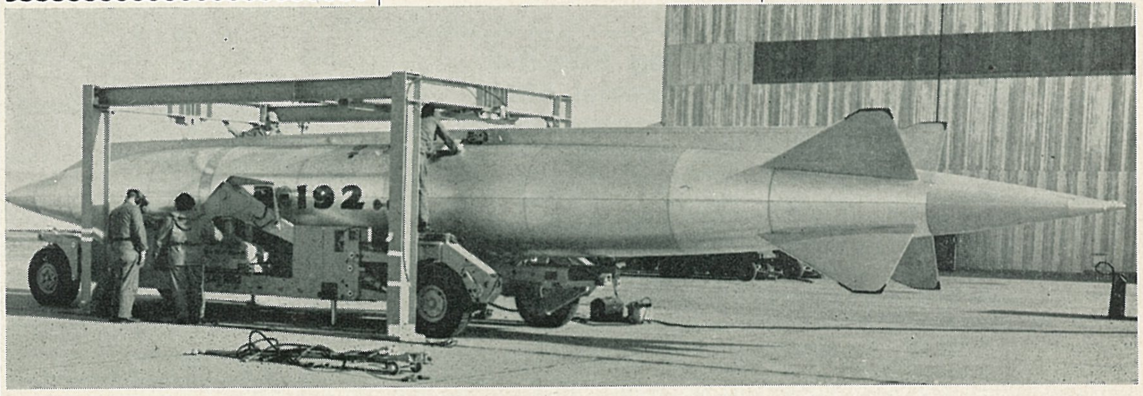
METALS ENGINEERS WILL GIVE PAPERS

Four Convair metals engineers will appear on the program of the American Society for Metals Congress, March 20-24 at the Ambassador Hotel in Los Angeles.

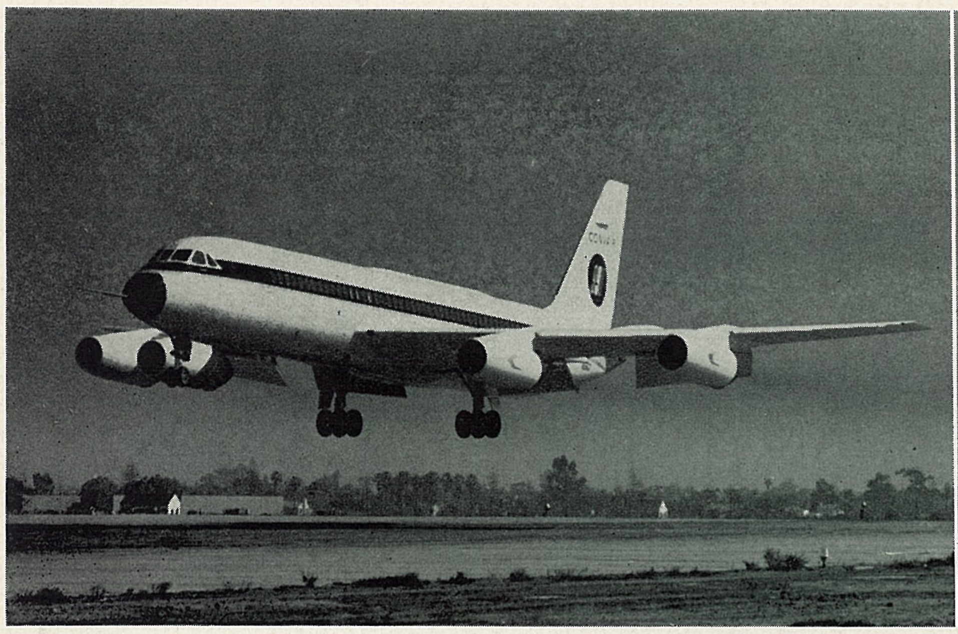
E. D. Heller of Pomona will serve as chairman of the March 21 afternoon session, and will deliver two papers. He will talk on the need for value engineering, and value engineering as a functional system.

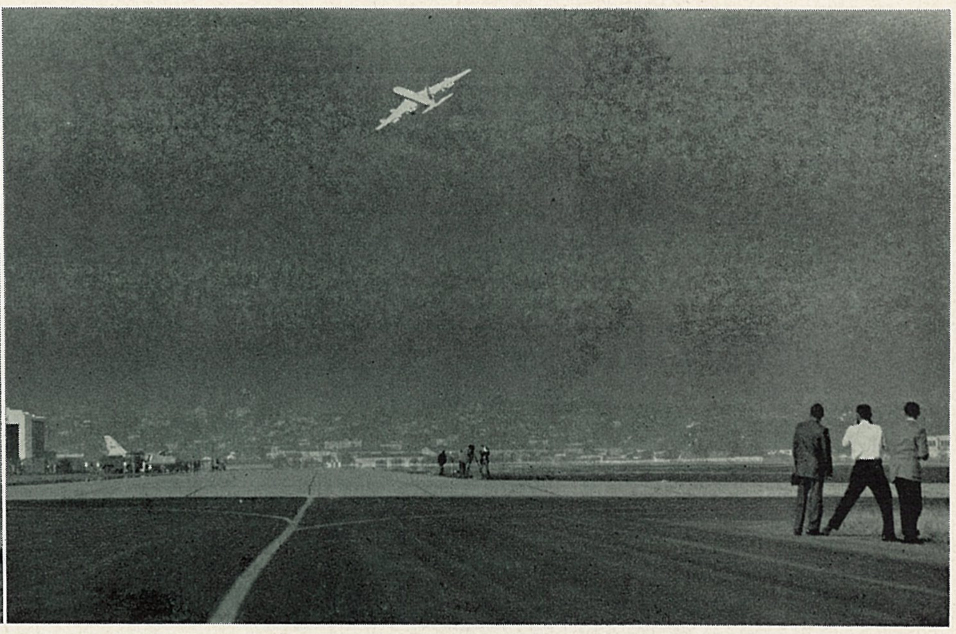
R. E. Mihalco of Pomona will speak on elevated temperature high speed testing at the March 22 morning session. At the same session, Abraham Hurlich of Astronautics will serve as chairman.

H. C. Sullivan of San Diego is programmed for a paper on plasma jet coating techniques at the March 23 morning session.



POD TESTER—Airmen check B-58 MB pod fuel system and electrical components on test stand built at Convair FW and installed at Carswell AFB. Positioning trailer is moved out during test.





WINGING AWAY—Convair's newest jetliner, first 990, lifted off Lindbergh Field at 10 a.m. last week (Jan. 24) for "highly successful" maiden flight with Don Germeraad at controls. Shot at right shows large white bird veering sharply westward to sea after takeoff to avoid residential areas. At left, 990 settles down in snowflake landing on Naval Air Station field at North Island after 2-hr., 3-min. cruise between Catalina Island and mainland.

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SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.

Forms Issued For SD Club's Scholarships

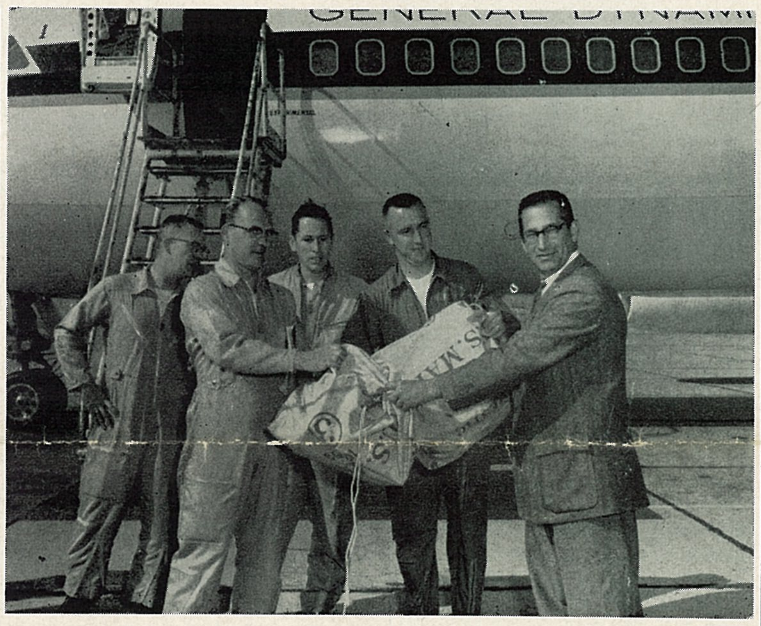
Application forms for the 1961 Convair San Diego Management Club Scholarship contest are now in the hands of all high school senior counselors in the San Diego area. Deadline date for submitting the forms is Feb. 24.

All sons and daughters of Convair SD and General Office employees are eligible with no restriction on length of employment, said Keith Blair, this year's committee chairman. Scholarships of $1,000 each go to the top-standing boy and girl. Four runners-up, two boys and two girls, will get $100 U. S. Savings Bonds.

Management Club Scholarship winners are eligible now for both club awards and company-sponsored General Dynamics Corporation National Merit Association Scholarships. In past years, explained H. E. Mayer, vice chairman and publicity director, winners of Convair Sons' Scholarships were eliminated from consideration in the Management Club contest.

This year, the SD club will adhere to the National Merit Association stipulation that a winner of one of its company-sponsored scholarships (now open to girls as well as boys) may accept other scholarships of not more than $500 in a lump sum, or $125 a year for four years.

(Continued on Page 2)



"MAIL RUN"—Flight crew members on first 990 flight, (from left) Al Hunt, Dick Bloom, Bob Dunn, Duane Anderson, hand mail bags full of first-flight covers to Pete Beyrer of SD employee services who rushed them to SD post office for cancellation.

Service Reps Go Afield As 880 Routes Expand

Transport service activities at Convair San Diego are stepping up to keep pace with expanding 880 jetliner service as Convair jet transports crisscross the country over routes of three domestic airlines, said L. J. Bordelon, chief of SD transport service.

Nineteen Convair SD field representatives are scattered throughout the United States at cities served by 880 jets now flying for Delta Air Lines, Northeast Airlines, and Trans World Airlines.

Support for 880 operations and maintenance is never static, explained Bordelon, as personnel are reassigned when new 880 customers receive their planes and new cities are added to the ever-growing 880 network.

As TWA inaugurated 880 SuperJet service last month, Convair men went to Los Angeles and San Francisco, West Coast terminals for TWA coast-to-coast flights. Ed Buckman and Mart Addis are in Los Angeles and Frank Laffoon, in San Francisco. Hank Bohmbach, Glen Arner, and Bill Lewis shoulder support responsibility at TWA headquarters, Kansas City, Mo. Bohmbach, has been on the job with TWA since the first 880 was delivered to the main base.

Now at Boston to serve Northeast Airlines are Walt Belliston, Phil Smith, Ralph Avila, and John Crenshaw. At Delta headquarters in Atlanta are Joe Dennis and George Pohlman. Also in the field to support other Delta, Northeast and TWA stations are Bob Fitzgerald and Frank Hollingsworth (Miami), Harry Addis (Houston), Court Zeiss (Chicago), Hank Morgan and Tex Ashmore (New York).

John Nowak is at Dayton to cover initial TWA operations there. Other line stations, such as Philadelphia, Montreal, Phoenix, Las Vegas, Memphis, New Or-

(Continued on Page 2)

Field Operations Leads '60 Safety, Housekeeping

Jet transport field operations held top honors for its record last year in the annual safety and good housekeeping contest at Convair San Diego.

The winning department (Dept. 171), under S. J. Barinka, superintendent, won the monthly safety contest six times and topped the good housekeeping roll nine times to total 15 wins out of a possible 24. With an average of 200 employees, housekeeping violations per employee throughout the year stood at .009, said M. C. Val Dez, chief of injury control and concern.

Next on the ladder was plant engineering, under H. A. Smith, chief, with seven housekeeping wins and four safety, making a total of 11. In third place was the production area headed by Emmett Williams—electric bench (Dept. 116), tubing and cable (Dept. 117), and proofing mock-up (Dept. 180), with a total score of 10.

Bunched at eight wins were last year's winner, manufacturing control; Plant 2 fabrication; experimental; Model 8 major, final, primary assembly, and field operations; and jet transport plastics and pod and pylon assembly.

Departments are judged each month on the number of doctor cases per number of manhours worked. A housekeeping committee judges departments or areas monthly for cleanliness and orderliness, material handling, fire hazards, and safety to determine percentage of violations per employee.

An awards dinner in the near future will see trophies going to 1958, 1959, and 1960 winners, said Val Dez. Experimental led the field in 1958 and manufacturing control in 1959.

'Squawks' Are Few As First Jet 990 Flies Shakedown

Convair's newest jetliner, the 990, is back at Lindbergh Field this week after completing its first 10 hours in the air, operating out of North Island Naval Air Station.

(Federal Aviation Agency requires that all new planes have 10 hours in the air before landing on commercial fields.)

Debut of the 990 at 10 a.m. Tuesday (Jan. 24) rivaled in public and Convair attention the 880's maiden flight just two years ago (when grade school classes were released to watch and curious motorists parked on Pt. Loma). Hundreds lined the fences along the runways and watched from vantage points on Pacific Highway as the larger, faster, sister ship rose from the field.

A TV cameraman was casually unpacking gear when the 990 began its takeoff run. He still seemed unhurried as the ship quickly gained speed. Then he burst into frantic action when the plane lifted off.

"Gosh," he panted. "I thought the boss said it was just going to taxi!"

At the controls was Don Germeraad, chief engineering test pilot, who also piloted the first 880 on Jan. 27, 1959. He took off in 3,500 feet of Lindbergh Field's 8,100-ft. runway, wheeled the big plane toward the sea and a two-hour, three-minute flight, cruising between the mainland and Catalina Island. The landing at North Island was uneventful and Germeraad's comment was "a very clean airplane."

Phil Prophett, assistant chief flight test engineer, termed the maiden trip "a highly successful first flight."

"Very few 'squawks' showed up on the shakedown," said V. L. Allward, chief of engineering flight test. "In fact, the flight was so trouble-free that only a minimum of maintenance was needed to get the plane back in the air again the next day."

Nearly 100 Convair SD men were shuttling back and forth from SD seaplane ramp boat landing to North Island during the days the 990 was based there. Steve Barinka's field operations crews, around 40 on two shifts, moved over to the island for their day and evening work hours. Others, making the trip to keep close tabs on initial flight testing, were from flight test engineering, electronics installation, manufacturing control, inspection, FAA designees from the quality control department.

With Germeraad on first flight were John Knebel, co-pilot; Dick Bloom and Duane Anderson, flight engineers; Al Hunt, flight test engineer; and Bob Dunn, flight test instrumentation engineer. The crew will probably guide the large white plane, with eye-catching 990 emblem, through initial testing to culminate in FAA certification later this spring.

Convair 990s will be moving out of SD plant to customers by early summer and going into passenger service by fall. Thirty-seven of the large jetliners have been ordered by four airlines—American Airlines, Swissair, SAS, and REAL.

Four Terrier Ships To Visit San Diego

Four of the Navy's new destroyer leaders, or frigates, the USS King, USS Coontz, USS Mahan and USS Preble, are scheduled to be in San Diego Saturday (Feb. 4).

Each of the ships is armed with Convair Pomona-built Advanced Terrier missiles.

According to information available at presstime, they will be tied up alongside each other at Buoy 19 near the foot of Broadway Landing. Because of tight schedules, however, the ships will not be open for visiting.

990 Carries Mail On Initial Flight

A cargo of special importance was carried aboard the 990 on her first flight last week.

As soon as the jetliner rolled to a halt at North Island, two mailbags full of commemorative envelopes were rushed to the post office where they were cancelled less than half an hour later.

The covers are of special interest to stamp collectors. A limited number are on sale, first-come, first-served, at employee services, Plant 1, for 25¢.

Log Book Entries

Promotions

SAN DIEGO

Promotions to or within supervision effective Jan. 16.

Dept. 3-1, Industrial Relations: To fire chief, D. D. Dimmitt. To fire lieutenant, P. J. Gute.

Dept. 6, Engineering: To engineering planning & estimating asst. supervisor, K. C. Cummins.

Dept. 31, Experimental: To asst. foreman, T. Castro, W. F. Whisman.

Dept. 44, Material Control: To material shortage general supervisor, G. M. Davidson. To material control supervisor, L. E. Grigsby. To material control asst. supervisor, J. D. Barbieux, E. B. Kellogg.

Dept. 120, Jet Transport Bench Subassembly: To asst. foreman, W. L. Clapper.

Dept. 136, Jet Transport Beltframe & Underwing Canoe: To asst. foreman, H. W. Arnold.

Dept. 137, Jet Transport Aft Fuselage Structure. Overwing Barrel, Lower Aft Canoe, Aft Tail: To asst. foreman, M. H. Button, R. F. Friar.

Dept. 140, Pod & Pylon Assembly; To asst. foreman, D. A. Jones.

Dept. 141, Jet Transport Delivery Preparation: To foreman, E. S. Needham. To asst. foreman, J. A. Barton, N. L. Carter, J. E. Grantham, C. L. Griggs, R. E. Handley, J. D. Hartman, D. W. Hayes, B. E. Hill, J. R. Holmes, W. H. Killingworth, R. A. Lobo, J. O. Lovell, A. C. Martin, T. R. McDaniel, R. C. Taylor, A. E. Vanderwyst, R. Welk.

Dept. 188, Inspection-Plant 1: To inspection supervisor, D. S. Arnott, H. L. Laird. To inspection asst. supervisor, J. E. Sanders, D. B. Seaburg, J. E. Slean, R. D. Williams.

Dept. 192, Manufacturing Control-Plant 1: To M/C foreman, A. J. Simington. To M/C asst. foreman, J. P. Gamache Jr., J. O. Kay. E. F. Monroe, D. C. Spalding.

Dept. 232, Model 8 Aft Fuselage Section & Mate: To foreman, M. C. Sullens. To asst. foreman, A. D. Mouser.

Dept. 249, Model 8 Spares Production: To foreman, J. A. Gliebe.

Dept. 267, Model 8 Final Assembly: To foreman, V. W. Schraeder.

Dept. 288, Inspection-Plant 2: To inspection asst. supervisor, J. F. Dunn.

Dept. 401, Tool Manufacturing: To asst. foreman, K. W. Richey.

Retirements

SAN DIEGO

Retirements effective during the last half of January.

Dept. 3-1, L. C. Jones, T. E. Remington, F. J. Scheibe, W. J. Sturges; Dept. 6-21, J. C. Sanders; Dept. 14, J. J. Ledsinger, J. J. O'Malley, S. L. Parker, C. O. Peterson, Nicola Polvere, L. R. Pugh, H. G. Rhode, A. J. Schurrer.

Dept. 15-6, J. D. Powers; Dept. 24-2, A. A. Perry; Dept. 25, Raffaele Diano, David Knox, Nim Lindsey, L. W. McAllister, D. J. McKeown, D. H. Miller, H. C. Mobley, Levi Moffitt, Fred Moist, F. M. Patton, J. B. Quinley, M. T. Radovich, E. H. Schaller.

Dept. 31, C. N. Johnson, Walter Mallett, T. C. McInerny; Dept. 34-2, L. M. Nichols; Dept. 101, R. W. Ferrell, Adolph Kapchinske, Alice P. Mooney, C. A. Nelson, J. J. Pfeiffer; Dept. 102, O. H. Roderick, E. K. Rose; Dept. 110, J. K. MacPherson, A. C. Matthews; Dept. 115, Frank Kelly, F. E. Neisler.

Dept. 120, Elmer McCaskey, R. E. Nassauer, A. F. Peterson, M. J. Reynolds, A. T. Routier; Dept. 129, E. M. Pernod, Edith K. Wright; Dept. 140, G. E. Nitsche; Dept. 180, Fred Robinson; Dept. 188, M. K. Kurtz, C. F. O'Rourke; Dept. 190-2, C. E. Plummer; Dept. 192, D. O. Johnston, R. R. Oglesby, J. J. Pender, H. J. Randall.

Dept. 201, C. H. Peponis; Dept. 205, S. A. Read; Dept. 218, W. G. Rowe; Dept. 230, C. H. Miller; Dept. 249-0, W. J. Miller; Dept. 280, B. R. Freakley; Dept. 288-2, G. A. Mueller, E. E. Robichau.

Dept. 400, W. H. Jones, C. W. May, J. H. Palmer; Dept. 401, E. J. Kaufmann, M. D. Keeney, C. R. Livingstone, E. J. Loos, Ethel S. Morris, Joseph Mountain, R. G. Parnell, G. M. Peace, Paul Petersen, T. W. Pickard, Thomas Preston, C. P. Roper, A. E. Scholz.

PALMDALE

Dept. 323, J. T. Todd; Dept. 324, C. M. Metcalf.

Personals

SAN DIEGO

To Dept. 31 friends I send grateful thanks for the beautiful flowers sent at the loss of my mother.

Sally Pena and family.

* * *

I would like to extend sincere thanks to all our friends at both Convair San Diego Plant 1 and Astronautics for the flowers, cards and contributions received at the loss of my wife, Rosaria (Sally) DeWater, Dept. 192, Astro.

Al DeWater and sons,
Dept. 129, Convair SD.

* * *

We wish to thank all of the many Convair friends who contributed to the Heart Fund, sent the lovely flowers, and were so kind and thoughtful at the death of our brother, Fred Bankerd.

Beatrice Bruner
Lilian Gibson
Lincoln Bankerd.

Births

SAN DIEGO

THRASHER—Son, Craig Steven, 7 lbs., 2 oz., born Jan. 7 to Mr. and Mrs. B. Thrasher, Dept. 91.



MONEY MEN—W. S. Nader (Dept. 140), left, and J. D. Milling (Dept. 90) received Mac-Save-it trophies at January meeting of Convair SD Management Club. Both men are in running for 1960 President's Award, top cost reduction honor.

Author-Police Chief To Address SD Club On 'Can West Win?'

W. Cleon Skousen, author of "The Naked Communist," will discuss "Can the West Win?" at the Feb. 15 meeting of Convair SD Management Club in the El Cortez Hotel Caribbean Room.

Sponsored by industrial relations, the social hour will start at 5:30 p.m., followed by dinner at 6:30. Tickets, priced at $2.50, are on sale to Management Club members at customary club outlets.

Presently chief of police in Salt Lake City, Utah, Skousen has earned a law degree from George Washington University, and was admitted to practice in the District of Columbia.

He was first asked to write a complete treatise on Communism while serving on the faculty of Brigham Young University from 1951 to 1956. His intensive study of the subject, however, began much earlier while he was serving with the Federal Bureau of Investigation during a period of 16 years.

880 Reps Go Afield As Routes Expand

(Continued from Page 1)

leans, and Dallas, were covered by Convair reps as these cities were added to 880 routes.

Similar support was due for Tampa the end of January as Northeast included that city in its 880 network.

Other transport field service representatives will be going far afield this year as 880-Ms go to Civil Air Transport in Formosa; Japan Air Lines; Avensa of Venezuela; Alaskan Airlines—and 990s join American Airlines, headquarters at Tulsa, Okla.; Swissair at Zurich; SAS at Copenhagen; and REAL in Brazil.

Returning to the San Diego plant from recent field trips were Bordelon himself, and R. K. Hall, both at Kansas City during initial period of actual TWA passenger service, and Mel Clause, who returned last week from Boston where he had been assisting with Northeast support during the last five weeks.

Lost & Found

LOST—Grey rubberized dacron raincoat Jan. 26 in Convair executive dining room. Name "Bill Schart" on tape inside collar. Finder please call ext. 1657, Plant 1.

Deaths

SAN DIEGO

LIVESAY—Jack, Dept. 15-5, based at Yokota AFB, Japan. Killed in accident Jan. 24. Survived by wife, Edith M.; one son, Greg; and a daughter, Ellen Mae.

Physics Course To Hold First Session Tuesday

So much interest has been expressed in the radiation physics course to be taught this spring at Convair San Diego, in cooperation with San Diego State College, that it may be necessary to offer two classes.

I. L. Beauchamp of Convair SD industrial relations medical section, who will teach the course, said that over 40 Convair SD and Astro people have turned in advance forms and many others have inquired.

Registration will be next Tuesday (Feb. 7) at the first session at 5 p.m. in the auditorium of Bldg. 14 at Convair San Diego, Plant 1. Entrance is by Convair ID card at Gate 2.

Everyone planning to attend the full semester course must be at the Tuesday meeting, stressed Beauchamp.

Tentative plans call for lectures on Tuesday evenings, 5-7 p.m., and laboratory periods on Wednesdays, 6:30-9:15 p.m. Lectures will be given in the Convair SD Bldg. 14 location; laboratory work at State College.

Fee for the entire course, including both lectures and lab experiments, is $40; lectures alone are $20. The full course carries three units of college credit; lectures only, two units. The course carries the designation of Physics 199 as a San Diego State College Extension course, arranged through cooperation of Convair SD educational services and State College's physics department. Prerequisites will be at consent of instructor.

It will be of particular interest to all Convair people, either at the San Diego plants or Astronautics sites, working with X-ray, radioactive materials, or radiation safety, explained Beauchamp.

The course has been approved for company tuition refund if Convair students make application through educational services offices within three weeks after registration. For information call Beauchamp at ext. 1911, SD Plant 1; or SD educational services office, ext. 1827.

HEAVY DRAIN DROPS SD'S BLOOD CREDIT

First-shift blood donors at Convair SD Plant 1 will be pulling SD's credit out of the red at the Feb. 23 bloodmobile visit.

Ken Wulfemeyer of SD employee services said that SD blood supply has been wiped out during the last couple of months. Accidents, pregnancies, major operations have contributed to an unusually heavy withdrawal of blood credited to Convair SD at the San Diego Blood Bank.

By the time the bloodmobile visits the plant this month there will be a deficit of 40 pints, he estimated. At least 150 pints should be collected on the Feb. 23 date to make up the deficit and carry through until the next blood collection, two months from now.

All donors at Plant 1 (with the exception of people in Depts. 6, 7, and 31 who donated at the last visit) are urged to sign up as soon as cards are in the hands of supervision next week (Feb. 10).

Former Executive Of Convair to Talk

"Era of Superior Management," will be the topic of R. B. Parkhurst, Hughes Aircraft Co. executive, at the San Diego Council meeting of Western Electronic Manufacturers Association tomorrow (Feb. 2).

The 7 p.m. dinner meeting will be in the Cardinal Room of Kings Inn in Mission Valley. Social hour is set for 6 p.m.

Parkhurst, now vice president of manufacturing at Hughes, served during World War II as assistant to the president of Consolidated Vultee.





TWENTY-FIVE YEARS—Five more Convair SD veterans received 25-year service emblems from R. C. Loomis early last month. In upper photo, Loomis is shown with E. G. Wood, Dept. 25-9, and L. G. McGiffin, Dept. 401-0. In lower photo, Loomis hands emblem to Avis Clarke, Dept. 100, as H. J. Schnaubelt, Dept. 15-5, and A. H. Kimble, Dept. 110, display their pins.

New Device Speeds Cataloging at SD, Makes Technical Library Unique in U.S.

A new device is cutting down the task of Convair SD librarians in cataloging thousands of technical reports received from industry, government agencies, and schools throughout the world.

By means of a Flexowriter, recently installed in SD engineering office services, the time-consuming job of cutting library file card and bulletin masters has been chopped at least two-thirds, said Keith Blair, Convair SD chief librarian.

As the masters are typed, tape is cut at the same time. The tape is run back through the machine to type bulletin masters automatically.

"It now takes 12 hours to do the work formerly requiring 36 hours each week," said M. N. Boylan Jr., head of the SD library's technical processes. "As far as we know, we are the only library in the country using the tape method to compile and constantly revise subject authority lists."

(Subject authority lists are maintained by large libraries to explain main subjects and subdivisions under which material is filed.) Subjects listed at the SD engineering library cover 30,000 reports and 18,000 books on everything from radiation effects on mice to heavy-water technology in Europe. There's even a technical report dealing with a theory on love and friendship!

At present, there are 90,000 reports and books on the shelves of SD's library in Bldg. 5.



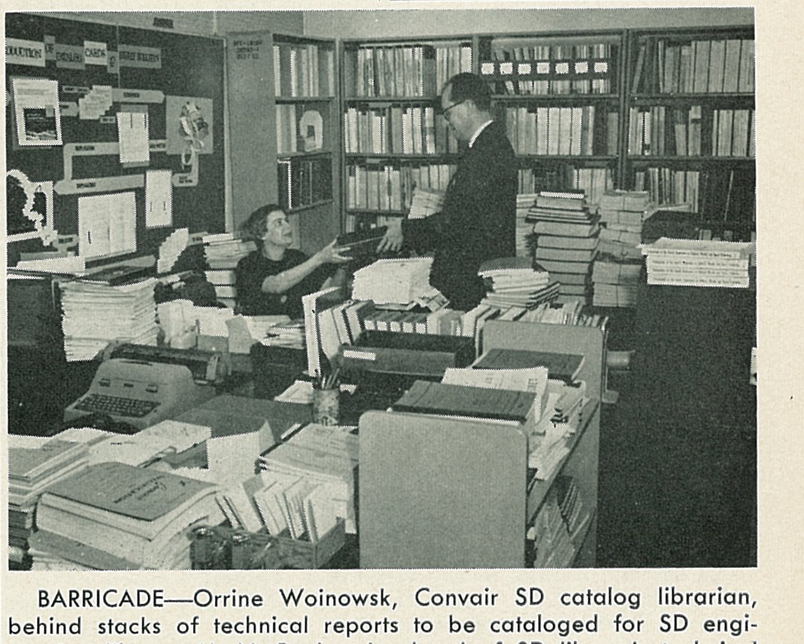
SPEED UP—Virginia McMaster, Flexowriter operator, cuts 400 feet of tape a week for library file card and bulletin masters.

Forms Available For Scholarships

(Continued from Page 1)

Thus, a winner of both a Management Club and General Dynamics scholarship could accept half of the normal Management Club award in addition to the company scholarship. Only additional eligibility requirement for General Dynamics scholarships is that one parent must have two years of consecutive employment with the company.

If Convair SD sons or daughters are unable to obtain forms at their high schools, they may contact Blair, zone 6-157, ext. 1543, SD Plant 1.



BARRICADE—Orrine Woinowsk, Convair SD catalog librarian, behind stacks of technical reports to be cataloged for SD engineering library. M. N. Boylan Jr., head of SD library's technical processes, brings another load.

★ Convairiety ★

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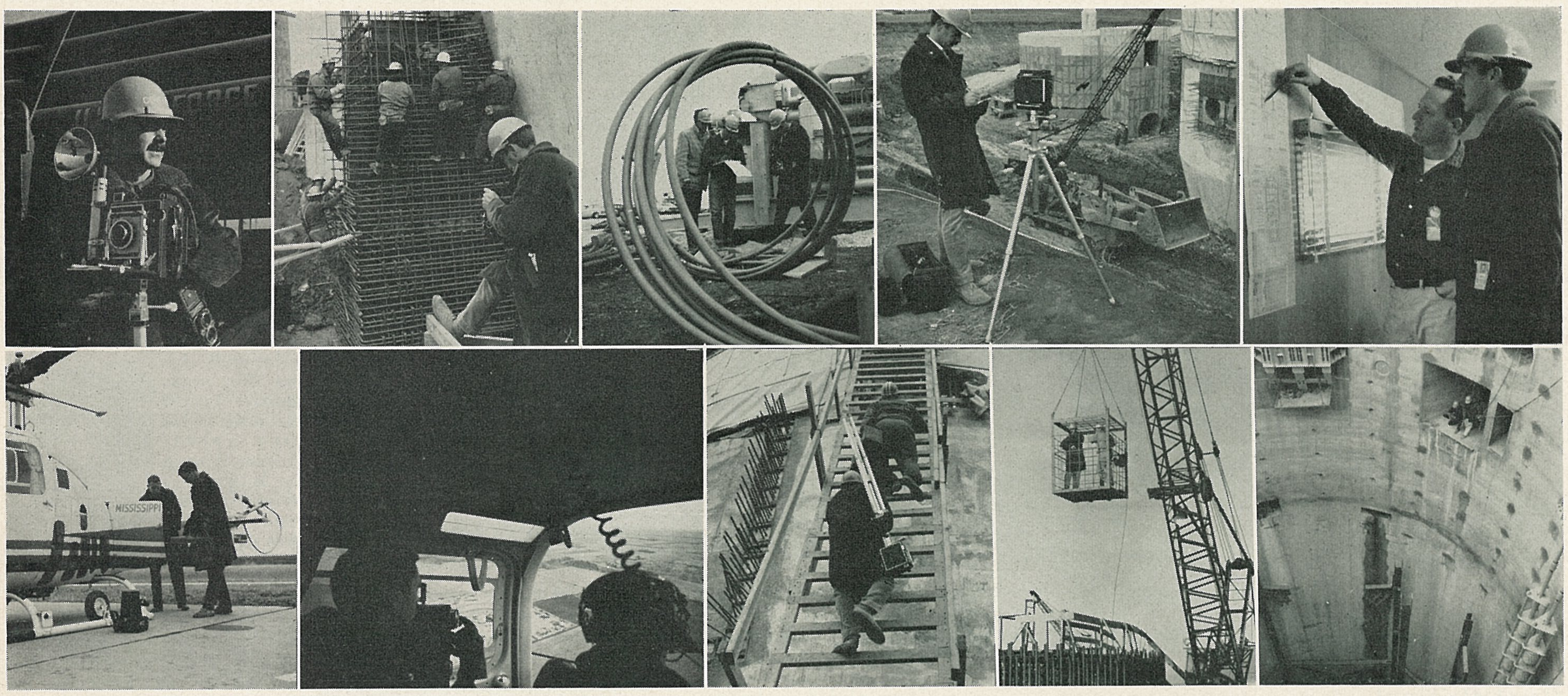
SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.



FIELD PHOTOGRAPHER—John Oldenkamp, Astronautics lensman assigned to Offutt AFB, is typical of Astro's field photographers and these pictures show him during a typical day of shooting at an Atlas launch site. At top right he confers with R. A. Bigelow, site surveillance engineer, on points to be documented in film. Oldenkamp shoots from air and from lofty perches, as well as from ground. Lower left shows him with Pilot Don Wright at takeoff from Lincoln AFB and approaching a site. Below center, with J. E. McAllister assisting, he climbs to top of silo, and at right he shoots from elevator and from tunnel mouth underground.

F-106 Ejection Seat Given 'Shakes' During Severe Structure Test

Literally trying to shake a F-106 ejection seat to pieces has been the effort of systems dynamics lab engineers at Convair San Diego.

Winding up a several-month certification program for the Air Force, test engineers have put the Convair-designed ejection seat through severe vibration tests to make certain it will hold together in flight and during ejection.

A vibration exciter outside the chamber containing the seat set it in motion at twice the amount of vibration it is ever expected to endure in flight.

"Constant vibration from jet engines could, conceivably, make the seat un-airworthy," said Dean Bowles, in charge of final testing phase. "The exciter delivered 3,500 lbs. of force on the 600-lb. seat, in other words, a plus or minus 5g input acceleration, without any effect on the structure."

Besides being vibrated in all directions, the seat went through temperature checkouts from room temperature to hot and cold extremes in fixtures designed by James Davidson of systems dynamics lab and constructed by Dept. 31 mechanics under Milton Bodger. Liquid carbon dioxide, minus 108 degrees Fahrenheit, was pumped into the chamber to bring the temperature down to minus 65 degrees. Electrical heating units inside the enclosed box-like structure raised the temperature to a sizzling 175 degrees F.

Cold and heat may weaken aluminum or rubber parts, making them either brittle or soft so that they could break or stretch under vibration forces, explained Bowles.

"All components of the ejection seat came through intact," he said.

The seat took its final punishment last week when it was dropped on all sides from the lab's drop tower. Because of the unit's heavy weight, a 10-inch drop was all it took to give the seat the same shock it will get during normal landings.

The shock tests concluded the entire ejection seat test program conducted over the last few months by systems dynamics laboratories, headed by M. C. Brady, chief. Final portion of the testing was under H. B. Bard, supervisor of the components group.

Other parts of the program saw the seat going through environmental tests such as salt spray, sand and dust, humidity, altitude under John Bard of systems dynamics utilities group.



Veteran news photographer Henry Kierstead of Astronautics made photos in layout above during visit to Offutt AFB recently.

F-106 Mfg., Modification Drawing Toward Close

All F-106A/B jet interceptors ordered by the Air Force under existing contracts have been accepted, leaving only some 20 planes undergoing "test to tactical" modification at Convair SD Plant 2.

The Air Force accepted the last 30 production planes prior to flight operation so they could undergo communication, navigation and landing change incorporation at Palmdale.

At the middle of January, 11 of the 30 production planes had been completed and work was continuing on the others. The last production plane was scheduled for ferry flight to Palmdale last month, thus ending the production program at Convair SD, according to W. J. Dewey, F-106 program administrator.

At the same time, factory work on "test to tactical" planes was nearing the halfway point with some 15 aircraft completed, nine of which had been ferried to Palmdale for electronic installations and flight testing.

Completed modified planes are currently rolling off the Plant 2 line on a three-working-day production cycle. Program's completion is anticipated in April of this year, with the last jet delivery to the Air Force scheduled in June.

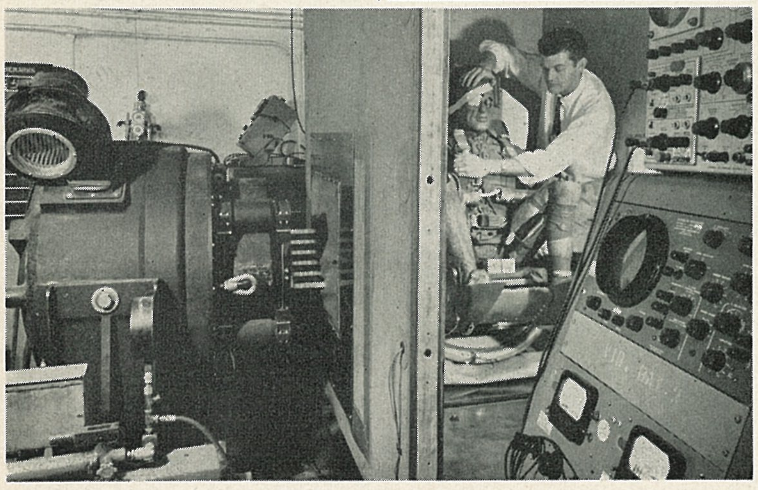
Meantime, as the F-106 program at Convair SD started its last lap, Model 8 transfer work at Convair FW drew to a virtual halt on Jan. 6 when the final F-106B forward fuselage section was crated for delivery to San Diego.

Convair FW will continue to manufacture certain replacement and spare parts for the time being, however, according to Bill Beck of FW contracts.

During the program, Convair FW was responsible for manufacturing F-102 and F-106 forward fuselage sections. The work also included manufacture of many components, such as:

Elevons, wing leading edges, rocket doors, dorsal fairings, fuselage aft barrel panels; vertical fins and leading edges, forward radar components, nose wheel doors, rudders, and others.

Convair SD was prime contractor for both planes.



SET FOR SHAKES—Dean Bowles of Convair SD systems dynamics lab makes adjustment on dummy in ejection set before strenuous shaking-up in recent seat vibration tests. At left is vibration exciter with instrument panel in right foreground.

Astro Physician On Cancer Board

Dr. James Ryan, chief physician at Astronautics, has been named to the education committee of the San Diego Branch, American Cancer Society.

Far Flung 'Beats'

Astro Emphasizes Photography In Base Activation Support

Documentation through still photography has reached new heights at Convair Astronautics in support of base activation activities.

Photography has long been a key tool at Astro, as well as other Convair divisions. However, the past year has marked an ever-increasing use of photographs in the field of Atlas missile base activation. Astro set up its first photographic support unit at Warren AFB just over one year ago. Prior to that time photographic needs had been provided from the main plant. Since then units have been added at Offutt AFB, Fairchild AFB, Forbes AFB and Schilling AFB. Four other units will be opened at still other bases before the end of 1961.

"As work loads dictate at bases, we dispatch help from the main plant," said E. H. Boldrick, Astro chief of still photography. "Too, we cover other bases as needed until time arrives to establish a full-time limit."

Since this support began, well over 8,000 negatives have been processed!

Base photographers cover what is probably one of the most extensive "beats" possible. They provide service at the base as well as at the widely-dispersed launch sites.

Transportation is a must. A typical work day may find a base photographer driving 200 or 300 miles in his rounds. Lucky are those at bases where a helicopter is available.

Each photographer uses an array of cameras, ranging from 35mm units through Speed Graphics and sometimes aerial cameras. Primary purpose is to make negatives, although each base has limited processing and printing facilities for rush jobs. Normally, exposed negatives are dispatched to the main plant for processing and printing.

Photographers report to the local communication department representative, although they are "on call" for any Atlas base activation task.

This means covering assignments for all Air Force units, sub-contractors and the Army Corps of Engineers.

Photographs find their way into such records as construction surveillance, changes and progress, shipping report claims, etc. Their use in technical manuals for training and operational use is extensive. Historical documentation is extensive.

"We have found photographs useful in showing newer activation units how problems were met and solved at older bases," Boldrick said.

(Astro employees have seen many examples of base photographers' work on popular "Atlas . . . Right and Ready" boards.)

Winter weather in some areas pose special problems. Camera shutters sometimes freeze and flash units require additional battery boosters to function. Then there is the problem of dust when cameras are transported over long distances.

Because negatives are often needed at later dates, special filing and cataloging is followed at the main photographic laboratory. Special numbers distinguish each base's negatives. Roger Jett presides over a group that keeps up with these negatives and routes all orders through production channels and back to the bases.

Astro photographers currently in the field include N. R. Bennett (Warren AFB), John Oldenkamp (Offutt AFB), Ron Boothe (Fairchild AFB), Craig Fishel (Forbes AFB) and Bill Touchberry (Schilling AFB).

Photographers from the main plant such as Jett, Bob Ries, Ted Winfield, Jack Stevens, Bob Weissinger, Keith Adams and Henry Kierstead have all "served time" in the field. Laboratory personnel who have gone out for different periods include Dick Screeton, Keith Johnson, Donald Forbes, Dawn Daynes and Walter Gray. Assistant supervisors Vern Heger, Clark Mitchell and Howard Woffinden have also visited many bases to advise and assist.

Meador in Temporary Assignment at SD

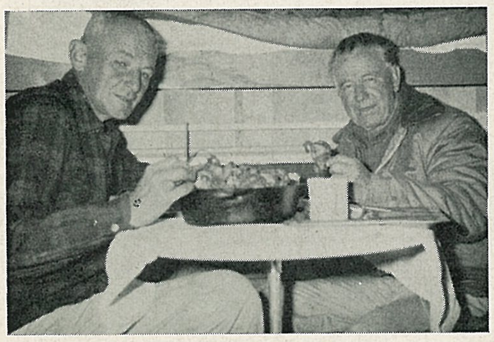
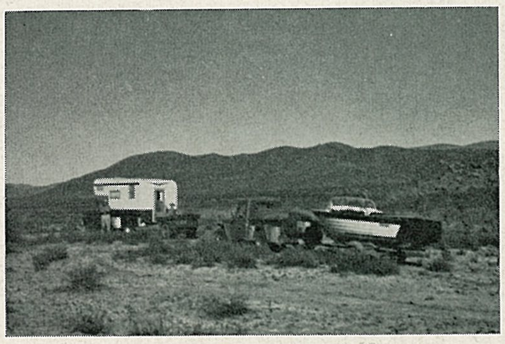
C. L. Meador has assumed responsibility for contracts and customer service activities at Convair SD in addition to his duties as Convair director of contracts, effective this week, according to R. C. Loomis, Convair vice president and SD manager.

Realignment of SD contracts, customer service, and material operations came with resignation of T. J. Sullivan, assistant manager at Convair SD since 1959. Sullivan leaves the company Feb. 6 to accept a position with a Los Angeles firm.

As acting manager of SD contracts and customer service, Meador will report directly to Loomis. D. H. Digges, manager of contracts, and O. W. Harper, acting manager of customer service, will report to Meador.

W. R. Bruce, manager of material, now will report permanently to Loomis.




OUTDOOR PARADISE—Three-week hunting-fishing trip deep into Baja California is annual event for Convair SD's William A. Dickenson. Photo at left in top strip shows travelers setting up camp. Duck hunting was great as "Sissy" and "Sunday" (they're Chesapeakes) demonstrate. In third photo Dickenson and Mrs. Henry Parrish wait for lobsters to boil. In lower left photo Dickenson and Parrish polish off some 25 quail. Trio made rough-country trip in two four-wheel drive trucks.

Good Hunting!

SD Sportsman 'Lives Off Land' During Three Weeks in Baja

When Convair SD's William A. "Bill" Dickenson (Dept. 192-4) gets away from it all—he really "gets," but good.

For three weeks out of each of the past 20 years, Dickenson has disappeared into the more remote areas of Lower California to hunt and fish.

And from all indications he's more than just a little successful. During his latest venture he never so much as opened a can of beans or bought himself a hot dog. His menu consisted of quail, duck, dove, clams, lobster and abalone.

His companions were Henry and Elizabeth Parrish of San Diego. Together they made an impressive sight maneuvering two four-wheel drive trucks, a 16½-ft. boat, two dogs and assorted hunting and fishing equipment.

"As expected, things got interesting once we were south of Ensenada," said Dickenson. "From that point on not a day went by that we didn't get game."

Around San Quintin Bay, where permanent camp was made for seven days, the men would hunt in the morning, one in the boat and the other stationed on shore.

"It was a regular shooting gallery with some flights numbering as many as 2,000 birds.

"The goose hunting was great, too," said Dickenson. "After putting the decoys out we'd slip on rain slickers that blended into the color of the lava rock formations and lie in wait. The waits were short."

When tired of fowl, the menu was varied with clams or lobster.

After breaking the bay camp, the trio moved down the coast to El Segundo, averaging speeds of only five or six miles an hour in the rough country. The total trip covered about 700 miles, nearly all of it off the beaten path.

"Quail hunting along the way was fabulous," recalled the Convair man. "At one time we flushed five coveys in a row averaging 75 to 100 birds in each."

Estimated cost for the three-week vacation per person was about $150, including license and shells.

Actually the toughest part of the whole affair is getting the proper Mexican permits and papers filled out, according to Dickenson. "Unwinding the government red tape may take an average of three days and it is necessary to see a bewildering number of officials," he said.

Shooting only enough game for meals, Dickenson didn't concern himself with either big horn sheep or deer. "I just don't like to spend four or five days on a mountain waiting for one shot."

Dynapak's Transfer To SD Completed

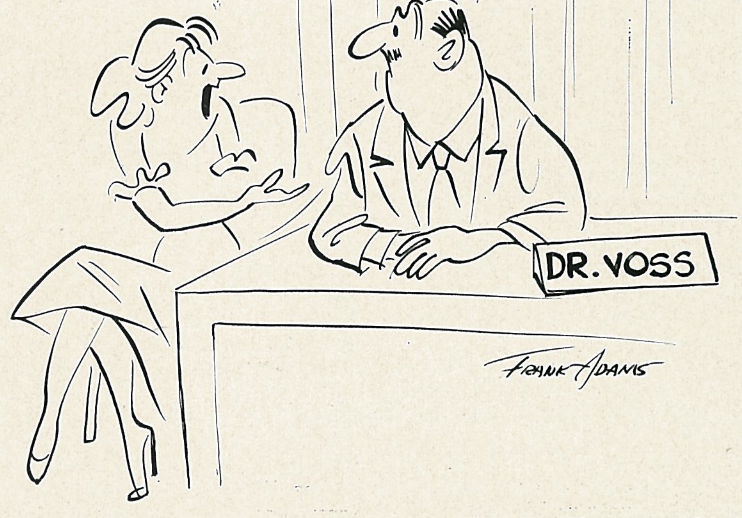
Dynapak personnel have completed the move from Pomona to San Diego with the occupation of the Fordham and Midway Sts. building a couple of weeks ago.

Sales, engineering, and administrative functions, including about 20 people, are now in the off-site building, vacated last fall by Convair SD service parts. Interior was completely renovated for the new tenants.

Production workers, about 30, are based in the manufacturing area at the SD seaplane ramp.

ACCOUNTANTS HONOR FAITHFUL MEMBER

George Hawke of Astronautics' controller's department was among a special group honored at the Jan. 11 meeting of the San Diego Chapter, National Association of Accountants. He was one of 15 men who attended all meetings during the club year.



"I'm a little worried about him . . . last night he left his pay check on the living room floor and dropped his *shoes* off at the finance company!"

Convairiety Helps Halt Engine Blaze

Convairiety's hottest copy was in the last issue.

It was so hot it caught fire —but not before putting one out at Fort Worth.

Jack Livingston, Dept. 24-3; Carl Shephard, 24-5, and H. Wayne Smith, 24-3, all ride to and from work in Smith's car. Two weeks ago each picked up a copy of Convairiety as he went out the gate. When the car failed to start they raised the hood. Flames shot up from the carburetor.

They smothered the fire with their Convairietys.

Mockup to Give Injury Drill

Convair FW firemen soon will get updated training in pulling "injured" airmen from a B-58 Hustler mockup.

First station of the wooden B-58 mockup is being fully equipped for the training program.

"Every fireman will get a chance to help an 'injured' B-58 pilot from the cockpit during a simulated emergency," says H. A. Cornell, Dept. 12.

Cornell, who will conduct the classes, says each fireman will be able to go through a practice maneuver each month.

"We'll also consider the various attitudes of a plane," says Fire Chief C. H. Jones.

"For instance, if the plane were in a nose-up position, the rescue operation would have to be conducted from atop a fire truck."

Wayne Hollingsworth, training specialist, says most of the training will take place on the wooden mockup, located outside Building 119 near the west gate.

SD Man Passes Structure Exam

R. L. Fefferman, Convair SD dynamics loads group engineer, was notified two weeks ago that he had received his California professional license as structural engineer.

The only Convair engineer to hold a structural engineer's state license, Fefferman joins 20 others with the same rating in San Diego.

A native of Minnesota, Fefferman came to Convair SD engineering in 1943 after serving as civil engineer for the Minneapolis airport. He received his California professional license as registered civil engineer in 1946 and the same year was loaned by Convair to the City of San Diego to formulate the city's master airport plan.

During the B-36 modification program he assisted plant engineering in evaluation of structural revisions to Plant 1 buildings, and was responsible for design of Model 8 flyway facility.



ON THE JOB—Max Goldman (SD-Dept. 192) may hold record for not missing day of work in some 30 years with Convair.

Three Decades Pass Without Single Absence

A record to top all records in work attendance is claimed by a Convair San Diego manufacturing control dispatcher.

Nearly 30 years is a long stretch to report to work every day, year in and year out, without missing a single work day. But that is what Max Goldman of Dept. 192-3 has done. Besides his perfect attendance record, he has never punched in late!

Since he first joined Consolidated Aircraft in Buffalo, N. Y., the spring of 1929 as a hand doper, Goldman has been on the job — constantly — except for a few periods of interrupted service during lay-offs in force.

He and his family drove west so that he could be on the job when the company opened in San Diego in the fall of 1935. In the years since, he has worked in a variety of different operations in the plant — paint shop, draw bench, interior trim, final assembly. In 1951 he went into production control, now manufacturing control, as a dispatcher. He was assigned to field operations during the entire 240-340-440 era. Now, as a manufacturing control dispatcher A, he controls purchased parts for Depts. 116, 117, and 180 in the crib on Bldg. 4 mezzanine at Plant 1.

His only hope is to finish his working years with a clean slate. That means another year-and-a-half, when he's eligible for retirement, without a missed day.

Preserved

Family Bible Retrieved by 'Trip Into Past'

L. L. Gardner of Dept. 81 recently discovered a treasure trove of antiques.

Trouble is, according to Gardner, "it would take a helicopter to get them out."



L. L. Gardner

Recently, for the first time, Gardner visited the home of his late great-grandmother in the Missouri Ozarks, not far from Springfield.

He had to walk the last three miles to the house because the road has disappeared after 50 years of non-use. But the trip to the two-story log house was worth the effort.

Everything was just as it was when his widowed great-grandmother died a half-century ago.

Bed clothing was still on the mattresses. Books, yellowed with age, were intact in the bookcases. A spinning wheel in the parlor needed only someone to operate it.

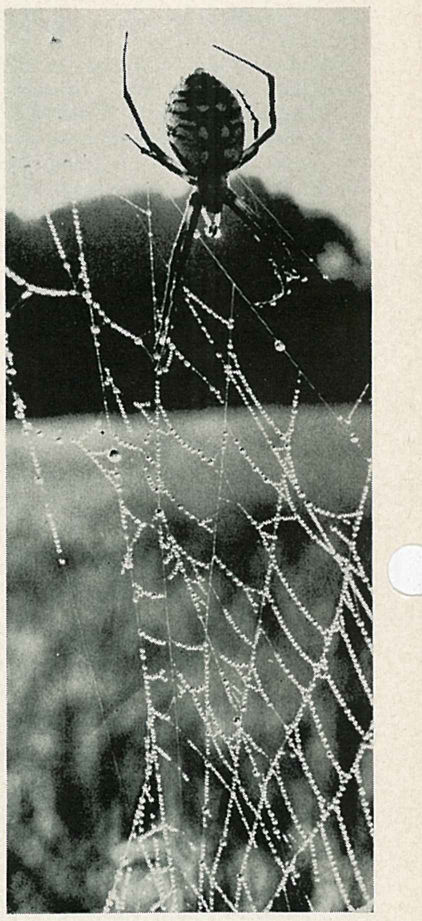
Confederate money was in its original hiding place in a dresser drawer. The "drinking bucket" and its dipper were in their accustomed place in the kitchen.

The family buggy outside still had a like-new shine, underneath the dust.

The little church adjacent to the family cemetery still has its pews and old pump organ in good condition, although no one has worshipped there in probably a half-century.

Gardner brought out three books: the family Bible and two Methodist hymnals, one dated 1813, the other, 1834.

First birth recorded in the family Bible was in 1810; the first death, in 1860. Gardner's great-grandparents were Mr. and Mrs. Clark Haile, whom he never knew.



"RANSOM" — is title of this unusual photo made by Convair SD Camera Club member Ron Ainsworth. Photographer got up early in morning to capture "string-of-pearls" effect, actually dewdrops glistening on web. Ainsworth used plus 2 close-up lens set F16 at 30th of second. Photo won club's "Print of Year" award, will now be entered in city-wide competition. Ainsworth has been a consistent winner in Camera Club events.

NEWS FROM OTHER DYNAMICS DIVISIONS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of seven divisions and a Canadian subsidiary, Canadair Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

Electric Boat of Groton, Conn., submarines.

Stromberg-Carlson, of Rochester, N. Y., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.

Material Service Division, Chicago, Ill., building materials, concrete products and coal.

* * *

Organization Chart For Dynamics Revised

A new and revised General Dynamics organization chart and related changes to the corporate management manual define the duties of the corporation's executive vice presidents and outline their relationships to other corporate, division and subsidiary executives.

C. Rhoades MacBride, executive vice president-operations, and W. P. Gullander, executive vice president-finance and administration, report to the president, Earl Dallam Johnson, and exercise his delegated authority in the direction and coordination of the activities of all divisions and subsidiaries and the corporate staff.



C. R. MacBride



W. P. Gullander

MacBride exercises the delegated authority of the president in directing and coordinating the activities of the divisions and subsidiaries. Reporting to him are the executive heads of the operating units along with the senior vice president-engineering, the vice president-personnel and secretary, the vice president-plans and programs and the vice president-special projects.

Gullander exercises the delegated authority of the president in directing finance, accounting, auditing and other corporate functions. Reporting to him are the vice president-advertising, the vice president and assistant to the executive vice president, the vice president and chief counsel, the vice president and comptroller, the vice president-public relations, and the vice president and treasurer.

★ ★ ★

Electric Boat has been awarded the Navy's Certificate of Merit for outstanding service in the field of ship design and weapons systems tests. Presented in person by Navy Secretary William B. Franke, the award was accepted by Earl D. Johnson, General Dynamics president, and Carleton Shugg, Electric Boat president.

* * *

A General Atomic TRIGA reactor has been purchased by Columbia University, where almost exactly 22 years ago the atom was first split in the United States . . . Recent performance with the Canadair 540 airplane indicates that the new 60-seat model now being offered to airlines has such a low breakeven load factor that it can be operated at a profit over local service route segments as short as 100 miles. The 540 is a twin-turboprop version of the Convair 440 . . . Japan Air Lines is planning to introduce Convair 880 from Tokyo to Okinawa, Hong Kong, Taipei, Bangkok and Singapore in July . . . General Dynamics with research, development and test awards of more than $313 million ranked fourth among companies and agencies receiving Department of Defense prime contracts for such work in fiscal 1959.

38 Specialists On Cal. Faculty

Thirty-eight General Dynamics Corporation specialists in the San Diego area are members of the University of California Extension faculty for the spring session beginning this week.

The group includes one from Convair General Office; 12 from Convair San Diego; 18 from Astronautics; six from General Atomic; and one from Stromberg-Carlson.

Roy F. Ashe, Convair director of estimating, will conduct an aircraft industry cost estimating course.

M. S. Lachman of Convair SD educational services will be leader of the 10-session management seminar. Dr. A. E. S. Green, Convair SD chief of physics, will be coordinator of a lectures series on space logistics; Dr. D. B. Medved, Convair SD staff scientist, is coordinator of a super aerodynamics lecture series.

Other instructors from Convair San Diego are: James R. Barthel, senior physicist; Maxwell Frank, publications editor; Kenneth G. Hendershot, senior thermodynamics engineer; James B. Herreshoff, design specialist; Leo Lapidus, assistant computer group engineer; Hideyoshi Nakamura, design specialist; Wallace W. Short, staff scientist; Richard K. Walter, design specialist; Herbert T. Wexler, engineering staff specialist.

Astro men are: Floyd I. Backus, senior dynamics engineer; Carl G. Erickson, senior electronics engineer; Raymond A. Ezekiel, management development specialist; James J. Fithian, electronics engineer; Edward M. Getzoff, lead engineer; Ernest A. Hamilton, electronics engineer; James R. Haskins, senior research engineer; Ralph H. Hinrichs, senior electronics engineer; Eugene C. Huebschman, design specialist; John E. Leib, design specialist, K. Leon Montgomery, senior research engineer; W. Duane Montgomery, research engineer; N. Thomas Norden, management development specialist; Cyril H. Nute, test engineer; Conway C. Sams, research engineer; Alfred F. Schmitt, design specialist; Philip J. Swanson, group engineer; Bruno F. W. Witte, senior research engineer.

General Atomic is represented by James H. Alexander, assistant chief of mathematics and computing; Gilbert B. Melese, research and development staff; Rudolph W. Preisendorfer, mathematician; Ward C. Sangren, chief of mathematics and computing; Marius Troost, research and development staff member; Kon Worth, research assistant.

William C. Slagle, senior electronic engineer with Stromberg-Carlson, San Diego, completes the list.

Erickson, Getzoff, Swanson, Hamilton, Fithian, Astro engineers; and Herreshoff, Walter, and Hendershot of SD engineering are conducting engineering review courses for California Professional Registration examinations. Last day to file for August examinations is April 1. Classes are now in progress for April engineer-in-training examinations.

Gen. Cooke to Talk At IAS Conference

A retired Air Force general will discuss "Central Theme," (Transition from Aircraft to Missiles and Spacecraft), before members of the Texas section, Institute of the Aeronautical Sciences, Friday.

Gen. Orval R. Cooke, now president of Aerospace Industries Associates, will address the group at 9:15 p.m. in Ridglea Country Club, following a social hour beginning at 7 p.m., and dinner.

Convair employees may get reservations through ext. 2901 at FW.

B-24 Radioman Recalls Hit On Battleship

Recent installments of Convairiety's history of Convair which have been dealing with wartime exploits of B-24 Liberators have more than a passing interest for C. F. Gonzales (Dept. 6).

He not only helped make the bombers at San Diego between 1940 and 1943, but later flew as a radio operator in a Liberator, chalking up 39 missions, all in the same plane.

Gonzales especially remembers one mission Oct. 26, 1944, for which crew members received the Presidential Unit Citation.

Flying from Noemfoor in New Guinea, the mission helped turn back the Japanese fleet which was maneuvering to prevent MacArthur from getting into Leyte.

"We logged 17½ hours, certainly one of the longest flights on record up to that time," recalled Gonzales. "Because of the heavy load of fuel, we could only carry one 500-lb. and one 1,000-lb. bomb.

"After considerable search, the fleet was located in the Sulu Sea. Coming in at 10,000 feet, one of our bombs landed on a battleship and it was later verified as a direct hit."

From June of 1945 until war's end Gonzales was a radio operator instructor at Yuma Air Force Base, Ariz. He rejoined Convair SD after his discharge and will soon receive his 20-year pin.

TECHNICAL WRITING CLASSES SCHEDULED TO BEGIN NEXT WEEK

New classes in technical writing at Convair San Diego will start next week with sessions for beginning and advanced writers as well as a special workshop being offered for the first time.

The beginning course will be taught by Allen Walden (Dept. 15) each Monday and Wednesday, between 4 and 5:30 p.m.

Both the advanced class and the workshop session will be conducted by Louis Henderson (Dept. 15). Advanced students will meet Mondays and Wednesdays starting Feb. 6; the first workshop is scheduled Feb. 7. The workshop will then continue on a regular Tuesday and Thursday schedule. All classes are held in the plant.

Henderson said the workshop is planned for the writer who has completed the first two basic technical writing courses. It will involve practical application of the principles learned and set the student to preparing pamphlets, manuals and publications in accordance with military and commercial specifications.

Additional information and registration details concerning classes can be obtained by calling Lee Woll, ext. 491, Plant 1 at SD.

Two 'Convair Sons' Face Navy Careers

Two FW "Convair Sons" have been appointed to the U. S. Naval Academy at Annapolis by Congressman Jim Wright.

They are Davis O. Smith, 18, son of Oliver W. Smith, auditor and office manager for Coburn Catering Co.; and Randy Cope, 17, son of Charles Cope of Convair's motion picture section at FW.

A graduate of Paschal high, Davis is now a freshman at University of Colorado. Randy is now a senior at Paschal and will graduate in June.

Physicist Attends Aerospace Meeting

Donald H. Robey, Astronautics physicist, is one of the featured participants in the seventh annual meeting of the American Astronautical Society in session this week in Dallas.

The Jan. 16-18 gathering drew hundreds of top aerospace specialists in the United States.



BALIKPAPAN—Maj. Gen. St. Clair Streets' 13th AF Liberators are shown during fourth raid against Borneo oil refineries. B-24s were accompanied by P-38s and P-47s for fighter protection.

Costly Raids

Long Range B-24 Strikes Aimed At Borneo's Oil Refineries

(Following is installment No. 52 of Convairiety's continuing history of Convair and Convair aircraft. Current installment continues account of B-24 contributions in Pacific.)

During the New Guinea campaign, a cherished goal was acquisition of an airfield within Liberator bombing range of the refineries at Balikpapan, Borneo, thought to be the primary source for Japanese aviation fuel. Borneo was within extreme cruising distance for Australia-based B-24s. Nine heavies of the 380th Group reached Balikpapan on an amazing 17-hour round-trip flight from Darwin in August, 1944, but were able to hit the target only lightly.

With capture and improvement of the Noemfoor airfield in Northwest New Guinea that fall, it was believed that Balikpapan had been brought within extended B-24 range if the mission were carefully planned; 2,350 miles round trip, to be covered in a little over 14 hours' flying time, starting with a load of 2,500 pounds of bombs and 3,590 gallons (21,540 pounds) of fuel.

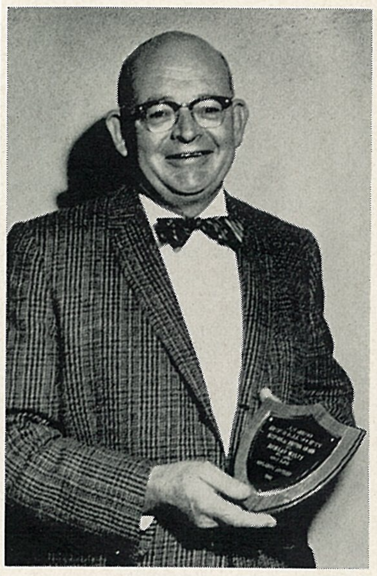
(On a typical routine mission, 5th Air Force Liberators flew about 1,500 miles in nine hours, carrying 6,000 to 8,000 pounds of bombs and 2,000 to 2,700 gallons of fuel. Missions were calculated for a ground speed of 157 mph, cruise altitude of 8,000-9,000 feet, bombing altitude of 12,000-13,000 feet.)

Representatives of Convair and Pratt & Whitney (engines) worked with 5th and 13th Air Force officers in setting up the flight plan, including a timetable for shifting weights: transfer bomb bay (auxiliary) fuel at 4 hours, shift one crewman from waist to tail at 6½ hours, bring two crewmen forward to flight deck at 9 hours. Ninety minutes after leaving the target, all machine gun ammunition (1,362 if none had been fired) was to be jettisoned.

Seventy-two heavies of the 5th, 90th and 307th groups took off from Noemfoor starting at 4 a.m. Sept. 30 and all but two reached the target, the Pandansari refinery being hardest hit. Heavy AA and fighter interception cost four Liberators. The 307th group was badly battered in the next strike Oct. 3, when the 20 planes were intercepted by 40 fighters from a crack naval air unit. During a running engagement that lasted 70 minutes — all the way back to the coast of Celebes — 24 fighters were shot down, but the group lost seven bombers.

The fourth and most successful raid put 73 Liberators over the refineries Oct. 14, accompanied by long-range P-38s and P-47s from the new fighter base at Sansapor, New Guinea. After this assault the Edeleanu refinery was in ruins and the Pandansari out of action, though repairable. (After the war, interrogation of Japanese showed that the most effective neutralization of Balikpapan probably was achieved by mine-sowing Catalinas from the Royal Australian Air Force. Their night sorties crippled shipborne oil deliveries.)

The cost of the Balikpapan strikes was high — 22 bombers and nine fighters — but 60 combat crewmen were rescued by Catalinas and the submarine USS Mingo; and 152 Japanese fighters were claimed shot down. (Major Richard I. Bong, the leading AAF ace, supposedly was retired from combat at this time, but he accompanied one mission as an "observer" and got his 29th and 30th planes.)



TOP AWARD — Howard O. Welty of Convair General Office public relations holds plaque from San Diego County Historical Society citing his history of Convair as winner in magazine division for year. Series appears continuously in Convairiety.

Nelson Fuller Gets Rotary Liaison Post

Nelson Fuller, a member of General Office public relations staff since 1944, has left Convair to join the secretariat of Rotary International at Evanston, Ill.

A former president of the Rotary Club of Pacific Beach (San Diego), Fuller headed the County Rotary Council in 1959.

Operating from Evanston, Fuller will handle liaison with Rotary district governors in 120 countries.

Coronado Next For Golf Club

Next Convair Golf Club sweepstakes will be played Feb. 25-26 at Coronado. Registrations can be made starting Feb. 13 by calling Alma, ext. 740, Plant 2.

Golfers turned out in full force for the Convair Golf Club sweepstakes at Caliente Jan. 21-22. Play was open to both Convair San Diego and Astronautics enthusiasts.

In the four to 11 handicap bracket, Hal Napier and Dick Parmley tied with 73 for low gross honors. Low nets were marked up by Al Reiter with 67 and Ralph Long and Bill Glithero with 68 each.

Low gross honors in the 12-16 handicap class went to Major Clark with 79, while Frank Gadient and Lloyd Goodman captured low net laurels with 69 and 70 respectively.

An 87 by Bob Stegell was low gross in the 17-21 category, while Owen Hasbrooke and George Laudermilk each scored 69 for low net in this class.

Of 22-36 handicap players, E. H. Ulsund took low gross honors with 92, Joe Terramagra's 71 and E. Tuszynski's 73 stood out among low net contestants.

DEADLINE FEB. 15 FOR NMA BOWLING

Feb. 15 is the deadline for team entry in the annual San Diego Area-National Management Association telegraphic bowling tournament set for 10:30 a.m. Feb. 26 at Clairemont Bowl.

Early indications are Astronautics will have a record entry in this year's affair, according to F. L. Erwin of the Astronautics Convair Management Club, event chairman for Astro.

Following the February tourney top Astro and SD teams are slated to participate in the Southern California Area Management Association tournament scheduled for March 17-18 at Clairemont Bowl, Erwin said.

Information on both events is available through Erwin, ext 1261 at Astro, and Harry Lund, ext. 1241, SD Plant 1.

Openings Continue In In-Plant Classes

A limited number of registrations are still being accepted for in-plant classes which are starting this week at Convair San Diego.

Class openings exist in Basic Electricity, Basic Electronics, Blueprint Reading, Effective Writing and Slide Rule. They are scheduled for day-shift personnel and are held after work in Bldg. 14 or Bldg. 32, Plant 1.

Interested second-shift persons at Plant 2 may register for a Shop Math course, held Mondays from 1 to 4 p.m. in Bldg. 1 at Plant 2.

For registration blanks or information, contact educational services office, Bldg. 15, Plant 1; or call Lee Woll, ext. 491, Plant 1.

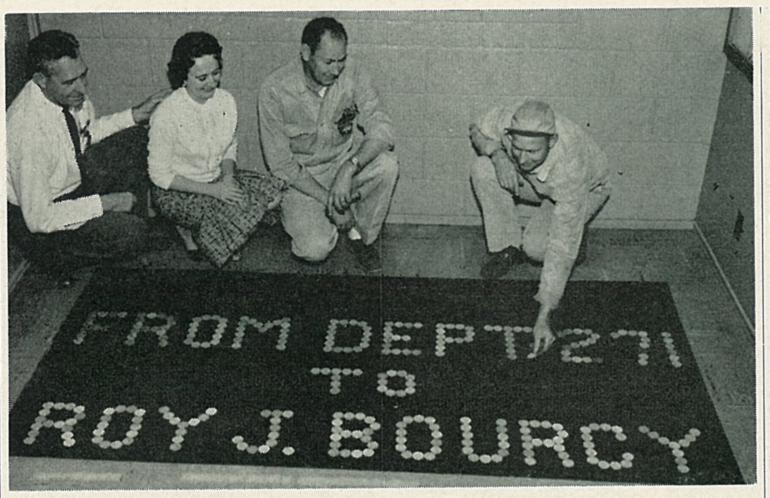
Classes Continue Open For Adults

Students still may enter Grossmont Adult School spring semester classes which started Jan. 16.

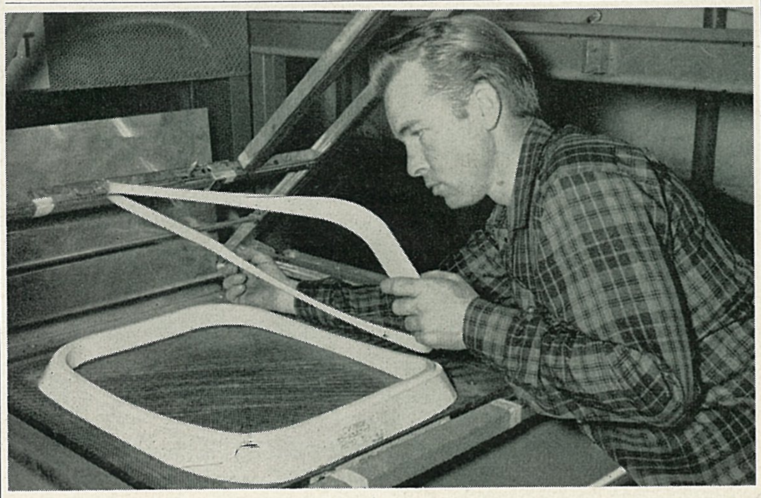
Courses are pointed toward high school accreditation; vocational preparation and job advancement; and leisure time activity or general information. They are held in various schools and other locations in Grossmont, El Cajon, Helix, Lakeside, La Mesa, and Lemon Grove.



"Don't tell me your wife's making you share her work again."



MONEY BOARD—Friends of Roy J. Bourcy in Model 8 field operations at Convair SD spell out message with 295 silver dollars to help during critical illness. Watching J. M. Tuggle place last period are (from left) E. F. Custenborger, foreman, Kitty Law, R. R. Mathews.



PLASTIC JACKPOT—Leonard H. Harris of SD had idea for thriftier use of Boltaron, thermoplastic material used for making jetliner window frames. It is expected to save enough in material previously wasted to earn him $914 Employee Suggestion award.

SD Road Runners Camp in Desert On First Outing

Seventy-two members and guests of the Convair SD Road Runners attended the club's first outing of the year to Painted Gorge in the Anza Desert.

Members making the trip manned 20 rigs, including 17 trailers and three campsters. A potluck dinner was enjoyed on Saturday and groups of members spent part of Saturday and Sunday scouting for new campsites in the area.

The Road Runners activity is one of the fastest-growing CRA groups at Convair SD and presently numbers some 130 active participants. Newcomers interested in joining the club are asked to attend two outings as guests before formal initiation.

Next club meeting is scheduled Thursday (Feb. 16) at 7:30 p.m. in the CRA Clubhouse, Gillespie Field.

Scale Model Meet Planned Feb. 18-19

Aeromodelers at Convair SD are getting their craft in top shape for the annual free-flight scale contest scheduled the Feb. 18-19 weekend.

Members of the historical committee of the San Diego section of the Institute of Aeronautical Sciences will judge the scale models Saturday evening, between 7 and 10 p.m., at the CRA Clubhouse on Pacific Hwy.

The flying session will start at 8 a.m. and last until noon on Sunday. Location for the meet had not been decided last week, but will be announced in the next issue of **Convairiety.**

SD Office Services In New Quarters

Convair office services, headed by R. I. Morse, manager, is now located on fourth floor of General Office building (Bldg. 19). Morse and his staff moved last week from the fifth floor.

Now in Room 410 are Morse; C. J. Taylor, departmental assistant; and O. B. Callihan, senior buyer, and secretaries. Duplicating machines, addressograph operations, and supplies are in the adjoining Room 416. Phone extensions remain the same.

Material Idea Earns $914 ES

Four for the price of two.

That sums up an Employee Suggestion submitted by a Convair SD man which will eventually earn him a total of $914.70.

Leonard H. Harris last week received the first installment, $457.35, for his suggestion which will save Convair SD expensive Boltaron, a thermoplastic material which can be formed under heat and will remain rigid at normal temperatures.

Harris, who is in Dept. 129, noticed that under the old method it was necessary to waste a considerable amount of Boltaron while vacuum forming the outer and inner covers of jet transport window frames.

His proposal to change the planning mockup by trimming the outside edge, thus reducing the overall size of the tool, now makes it possible to make four parts instead of two from the same piece of material.

As there are 96 windows in each 990 and 88 in the 880, savings from the suggestion mounted fast.

The 26-year-old Boltaron machine operator said he would use the award money to make a down payment on a home.

Bi-Lingual Toastmasters Club Launched for Spanish Speakers

A "hands across the border" movement has become reality with the birth of a bi-lingual Toastmasters Club for Spanish-speaking men as a community project of Convair Toastmasters.

This will be the first Toastmasters Club in the world to use another language in its meetings, said J. L. Carr, Astro engineer, who has spearheaded its formation. Although more than 3,000 clubs are active in 33 different countries, their members are all English-speaking people.

Hoping to further better communication with Mexico and other Latin American countries and to advance the "good neighbor" policy by becoming more proficient in use of the language, a group of Spanish-speaking Convair SD and Astro men conceived the idea of a bi-lingual Toastmasters Club. Nucleus is 16 Astro and SD men who met in first regular session Jan. 17 in the Astro executive dining room. They hope to increase the membership to 30 or 40 men with a working knowledge of Spanish.

Raoul Morales of Astro, president of the La Jolla Toastmasters Club, chaired the first meeting and Andrew Gormish of Convair SD, Convair Toastmasters president, performed toastmaster duties.

Meetings will be held at 6:30 p.m. first and third Mondays, probably in the new Convair cafeteria on Pacific Highway. Members must be prepared to deliver their speeches, at least, in Spanish.

As plans develop for the group, they will hold periodic meetings in Tijuana with interested Mexican men as guests. At these times, said Carr, the meetings will be held in English to give their guests practice in the other language.

As one of its first projects, the club has been asked by International Toastmasters, Inc., to translate the organization's educational material into Spanish. This material will be made available in Spanish-speaking communities and Latin American countries.

Temporary officers are: Carr, president; Jack Denson, administrative vice president; Chuck Clower, educational vice president; Gene Denson, secretary; and Ralph Olivarez, treasurer. All are Astronautics employees.

Jerry Young of Convair SD Dept. 15 and a district officer assisted in organization and program planning.

Election of a permanent officers slate is set for March with installation in April.

Interested Convair men are asked to call Jack Denson, ext. 1534 at Astro, or Peter Aperlo, ext. 1104, SD Plant 1.

Top Badminton Stars at Astro

Astronautics CRA Badminton Club now numbers among its members four of the outstanding players in the country.

They are Jim Poole, ranked first in the nation; Bill Berry, second; Dick Mitchell, third; and ninth-ranking John Lieb.

Total club enrollment now stands at 30.

The club will hold its fourth annual tournament March 4 and 5 in the Federal Bldg., Balboa Park. This is co-sponsored by Astro and the Convair San Diego club. Trophies will be awarded in A, B and C divisions for men's and women's singles and doubles, and for mixed doubles.

The club holds regular play nights at 7:30 p.m., each Tuesday, in the Federal Bldg. Additional information is available from Les Marr, CRA commissioner, ext. 1780 at Astro.

Convair SD coordinator is Bill Johnstone, ext. 2995, SD Plant 1.

Engineer Week Set Feb. 19-26

Several hundred Convair SD and Astro men will be carrying out assist duties during National Engineers' Week, Feb. 19-26.

Members of SD chapters of at least 20 national engineering and technical societies, including many Convair men, as sponsoring groups, are pointing the annual affair especially to the interest of young people in the San Diego area. Nearly 500 selected students and their counselors will be invited to view exhibits and displays in Balboa Park's Conference Bldg. on Saturday (Feb. 25).

Displays will be open to the general public the next day, Sunday (Feb. 26).

Other scheduled events call for a joint societies' dinner Feb. 21 in the House of Hospitality and exhibit preview for members, school counselors and teachers Feb. 24.

Financing is being carried out by sale of blue buttons ($1 each) advertising the dates.

Shoot Set Feb. 12 For Muzzleloaders

A special shoot for Convair SD and Astro gun enthusiasts with muzzleloading rifles will be staged Sunday (Feb. 12) at 9 a.m. at the Gillespie Field Range.

It will be the first in a series of muzzleloading shoots which will be held monthly on the second Sunday. Match events will be held under the direction of George Rowley (SD Dept. 171).

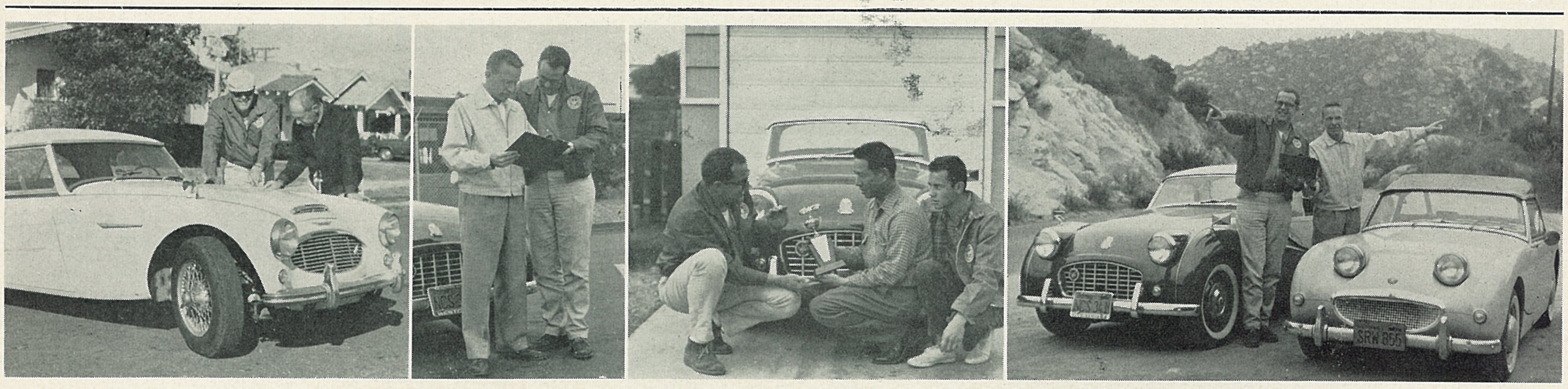
For those who ask, muzzleloading explanations and instruction will be given. Spectators are invited.

Saturday Schedule For Salvage Yards

Convair employees may shop at SD and Astro salvage yards on the following Saturday schedule: SD—Feb. 4 and Feb. 18; Astro—Feb. 11 and 25.



HOLLOMAN GIFT—Genevieve Kneisel (Dept. 313-6) hands over $1,000 check from Convair employees at Holloman AFB, N.M., to A. A. Webster Jr. of Otero County United Fund as Con-Trib-Club donation. Looking on, from left, are: Frank Roeder, chief of industrial relations; Con-Trib Committee members Martha Williams, Jake Darsey, John Harris; Rev. E. E. Hamilton, United Fund Drive chairman; John Martinez, Charles C. Reitzel, Al Parkhurst, all of Con-Trib Committee.



CAR CAPERS—Plenty of hard work and imagination has gone into laying out of rally route for fourth annual "Seat of the Pants" which will be conducted by Convair SD Sports Car Club Feb. 12. Getting their heads together in first photo are Dick Perkis and Sid Weiner, activities chairman and rally course chairman, respectively. In next photo are Jim Hamill of course committee and Perkis. Next, admiring first-place, overall trophy which will be awarded are Perkis, Kim Hom and Bobby Weiner. At right, Perkis and Hamill seem to be trying to figure out which way to go next.

Archers Plan Annual Award

To stimulate increased interest and participation among old and new members Convair SD Archery Club this month announced plans that it has established a new "Archer of the Year" award.

Winner of the award will receive a custom-made bow valued at approximately $75; the runner-up will get a jacket.

The contest started with the Jan. 19 club meeting and will end with the February meeting in 1962. Selection of the top two archers will be based on a point system and members will be given credit for serving on committees, holding office, attendance at meetings and shoots as well as for getting new members to join the club.

Present club membership is 35. Main events held by the club are monthly shoots and meetings. Old and new members are encouraged to attend the next meeting on Thursday (Feb. 16) at 7:30 p.m. in the CRA Clubhouse on Pacific Hwy. For further information, call Al Phipps, evenings, CY-5-8194.

Three Shooters Score 'Double'

Three Convair SD Pistol Club shooters scored double honors at the Jan. 21 contest taking awards in both the police course and short national.

Jim Halfacre (Dept. 180) notched a clean sweep, winning the master class with a 291 score and placing first in the short national with 276 points.

Placing second in the master class and third in the short national was Joe Williamson (Dept. 401-5) with respective scores of 288 and 273. Also taking honors in both events was Carl Hornburg (Dept. 139) who was second in the expert class with 280 points and second in the short national with 273.

Single winners included Bill Dittmann (Dept. 6), expert class winner, 289 points; A. B. Carlson (Dept. 68), first place in sharpshooter class, 272 points; Arley Utter (Dept. 129), first place in marksman class, 235 points; E. E. Bickar (Dept. 215), fourth place in short national, 269 points.

SD Man Appointed By State Archers

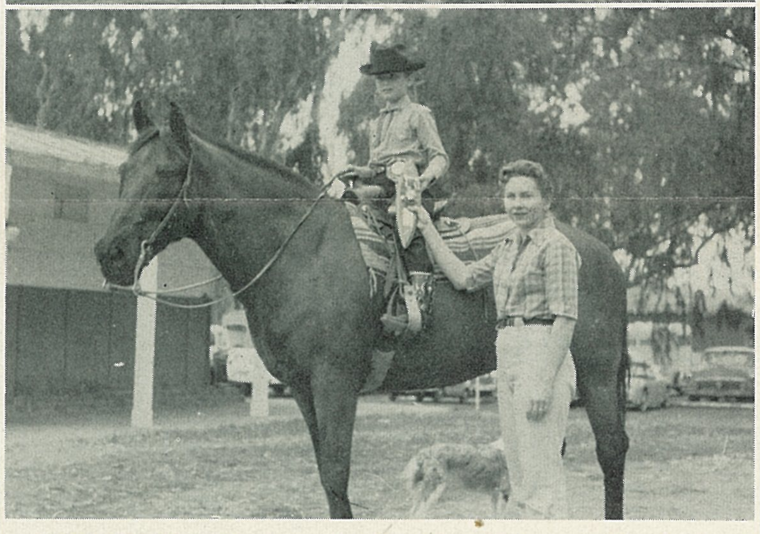
Convair SD Archery Club president Al Phipps of Dept. 401 last month was appointed sectional coordinator of the California Bowmen Hunters and Field Archers Association.

As such, his jurisdiction will encompass archery programs and meets in Ventura, San Diego, San Bernardino, Orange, Los Angeles and Imperial counties. Member clubs are scattered from as far north as Ventura to below the Mexican border (a club is established in Tijuana) and as far east as Yuma, Ariz.

Phipps for a number of years has spearheaded activities of the Convair SD Archery Club and has been its representative at numerous state shoots and conventions.

CRA Sports & Recreation Convairiety





SHOW STOPPERS—Convair SD Riding Club passed out pile of trophies at Open Fun Show Jan. 22. Entries totaled more than 200. In top photo, Susan Smith, horsemanship class winner, receives trophy from Gene Evans (Convair Rose Canyon). Below, Jenifer Harwell (daughter of W. B. Harwell, Dept. 6-41) receives trophy from Bobby Arbuckle.

SD Riding Club Draws 200 Fun Show Entries

Convair riders made a representative showing at the Open Fun Show sponsored by Convair SD Riding Club Jan. 22 at the Clover Leaf Stables in Mission Valley.

More than 200 riders entered the show which was attended throughout the day by large crowds of enthusiastic spectators.

Youngest of the Convair winners was Jenifer Harwell (daughter of W. B. Harwell, Dept. 6-41). Riding her gelding, Smokey, she took honors in the Western Pleasure Class for children 12 and under. Her father placed fifth in the Hunter Hack Class on his thoroughbred Running Spade.

Top honors in the Convair Western Class went to Lee Pitman (Astro Dept. 733). Barbara (daughter of Frank Darnell, Dept. 137) and Dick McGregor were judged the best dressed western couple.

Only Convair double winner was Jarvis Esenwein (daughter of August C. Esenwein, Convair executive vice president) who won the Working Hunter Class on her thoroughbred, Little Beaver, and repeated in the Green Working Hunter Class on Glamour Test.

Next Convair SD Riding Club meeting will be held tomorrow (Feb. 2) at 7:30 p.m. at the Gillespie Field CRA Clubhouse. The 1961 membership cards will be issued at the meeting, according to V. V. Thomason, club president.

SD Hoopsters Lead Leagues

Convair SD's varsity basketball team was leading two local leagues last week and had yet to suffer its first defeat.

In the Industrial "A" League Convair rang up four straight wins, whipping General Atomic, 52-43; Local 89, 45-39; Rohr, 41-37; and Ryan 48-23. Also entered in the National City League, the CRA hoopsters are holding down the top spot with three wins in as many games.

Bob Miller will take over as manager of the squad this week, replacing Gary Bowers who will be leaving the city on company business.

Players on the team are Dee Trepanier, Mel Stilson, Charley Wright, Curt James, Bill Bullock, Gordon Place, Dick Hunnington, Frank Miller, Dick Fenton and Gale Higbee.

200 Entries Expected by Club For 'Seat of the Pants' Rally

If sheer effort can be used as a measure, the fourth annual "Seat of the Pants" rally to be held Sunday (Feb. 12) will be the most successful venture of its kind.

Some 35 members of Convair SD Sports Car Club will have expended more than 500 man-hours planning, mapping and manning the rally route when the last car crosses the finish line.

By the time the rally starts the 90-mile course will have been measured almost to the last inch for accuracy. Covering only paved roads, the event will last about three and one-half hours, including a 15-minute rest break.

Entries were pouring in at a fast clip with more than 70 tabulated early this week, according to Kim Hom, rally master. More than 200 entries are expected by the time the first car leaves the Convair Astronautics parking lot at 12:01 p.m.

All Convair SD employees and family members are invited to participate without charge as a special club courtesy. It is not necessary to drive a sports car in the event, nor is it required that drivers be experienced rally runners. A special class will be held for novices (defined as anyone who has not won a rally trophy in the past year).

Award ceremonies will take place after the event at the Flying Hills Country Club. Some 19 trophies will be presented to the top finishers in five classes.

Members of the course committee include Sid Weiner, Dick Perkis, Jim Hamill, Del Griffin, and Chase Allen. To place entries and obtain additional information call Sid Weiner, HO-9-2363.

FLIGHT FILM SET FOR SOLO FLYERS ON FLIGHT ASSIST

"New Flight Assistance Program" is the title of a film to be shown by Gerry Seymour of Airport Traffic Control at the Feb. 8 meeting of the Solo Flyers ground school class.

Shown through arrangements of the Federal Aviation Agency the film will be screened shortly after 7:30 p.m. in Jim's Air Service classroom at Lindbergh Field. Interested Convair SD persons are invited to attend.

Rex Robinson, ground school instructor, also reports that a new ground school class will start on March 1. It will be held on Wednesday evenings between 7:30 and 9:30. For information, call Robinson, ext. 2271, Plant 1.

Choralaires Plan Spring Schedule

A "fine turnout" showed up early this month for the first rehearsal of the recently reorganized Convair SD Choralaires.

Director W. A. Vogel said almost all of the old members as well as a sprinkling of new faces were on hand as the choral group started preparations for a number of public appearances tentatively scheduled in the spring.

Convair SD singers interested in joining the group can do so by attending one of the Monday evening rehearsals which start at 7:30 p.m. in the CRA Clubhouse on Pacific Hwy.

Four Families Win Disneyland Tickets

Four Convair SD families will be seeing plenty of Disneyland, all for free, with ticket books they won in the recent "Winter Wonderland Weekend" contest.

Five Magic Key books, containing 10 coupons for Disneyland rides and attractions, went to each of the following lucky winners: E. C. Jones (Dept. 141) H. A. Means (Dept. 25-9), E. E. Yturralde (Dept. 279), and Carlene K. Wright (Dept. 4-0).

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

AEROMODELERS — Annual free-flight scale contest Feb. 18-19.

BADMINTON — Annual tourney March 4-5, Federal Bldg., Balboa Park. To enter, call Bill Johnstone, ext. 2995, Plant 1.

BRIDGE CLUB—Next session Feb. 7, 7:30 p.m., Hotel Barcelona, 326 Juniper St.

CHORALAIRES — Rehearsals each Monday evening, 7:30 p.m., CRA Clubhouse, Pacific Hwy.

FENCING—Workouts and instruction every Friday, 7:30 to 9:30 p.m., YWCA, 10th and C St.

GOLF CLUB—Sweeps Feb. 25-26 at Coronado. Registrations open Feb. 13; call Alma, ext. 740, Plant 2.

ICE SKATING—Winter weekend, Feb. 17-19, at Big Bear Lake. Call Martha Woodberry, ext. 1245, Plant 1, before Feb. 5 for reservations.

JEEP CLUB — Annual Rough Riders desert trip Feb. 4-5. Jeepsters meet Friday night at Truck Haven on Hwy. 99, leave Feb. 4 morning at 8.

JUDO—Workouts and instruction every Thursday in CRA Clubhouse on Pacific Hwy., 6-7:30 p.m.

MOVIES — Reduced-price movies each Friday, Saturday and Sunday at Adams Theater, 3325 Adams Ave. Adults: 50c; children under 12 free if accompanied by an adult.

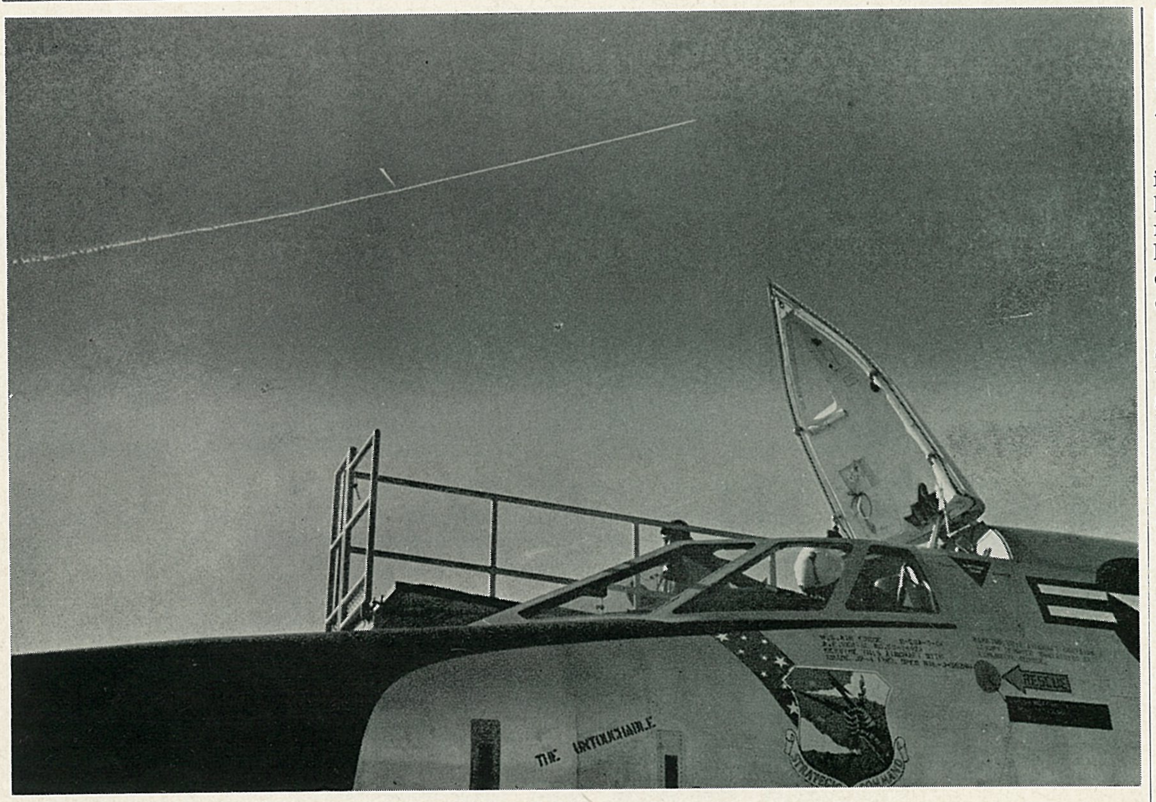
PISTOL CLUB — Next shoot Feb. 12, San Diego Police Pistol Range, 9:30 a.m.

RADIO CLUB — Meeting tomorrow (Feb. 2), 7:30 p.m., Harbor Drive headquarters. Code and operating procedures class now under way.

RIDING CLUB — Meeting tomorrow (Feb. 2) at 7:30 p.m., CRA Clubhouse, Gillespie Field.

SPORTS CAR CLUB—Meeting tonight (Feb. 1), 7:30 p.m., Museum of Natural History, Balboa Park.

WOMEN'S ACTIVITIES — Charm school classes now being held 7-9 p.m. every Wednesday in executive dining room of Convair cafeteria on Pacific Hwy.



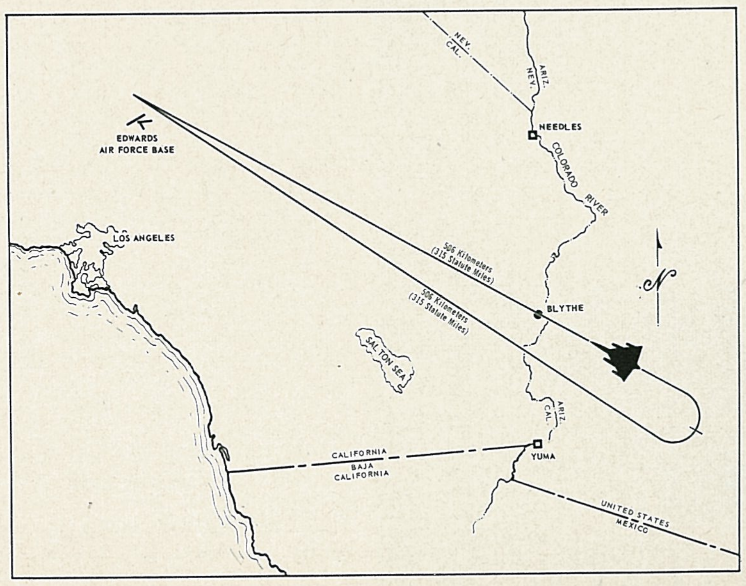
RECORD SETTING—Thin contrail in sky is B-58 "Road Runner" during record run, while on ground is sister ship called "The Untouchable."

RADARS, MOVIES 'WATCH' HUSTLER ON SPEED RUNS

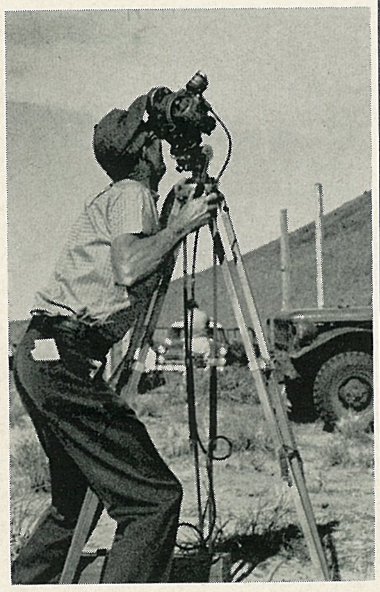
Movie cameras in the air and on the ground, radar stations and visual observers kept watch on B-58s during record runs last month, and all but the radars had a hard time keeping up.

There were eight "chase planes," according to Oz Duke of Convair FW engineering motion picture section but the "chase" was no contest. Only one F-104 managed to keep fairly close and it lost out before the first turn.

To make runs official, B-58s were required to make 180-degree turns outside imaginary pylons. At each "pylon" a National Aeronautic Association observer lay on his back, sighting upward through taut wire "cross-hairs" to make certain turns were outside. Three such "pylons" were located at Arizona end of "race track." Radar concentration served this purpose at Edwards AFB end of run. NAA had 17 officials on hand to monitor flights.



THE COURSE—Teardrop course extended California to Arizona and back.



QUICK SHOT—Filing record B-58 runs was catch-as-catch-can affair. Lensmen were posted at key points on desert and aloft in chase planes that couldn't keep up.

B-58s Smash Records In Desert Speed Runs

Data showing B-58 Hustlers set six new world speed marks last month is being turned over to Federal Aeronautique Internationale for confirmation.

Jan. 12, B-58 No. 442 of the 65th squadron, 43rd Bomb Wing, Carswell AFB, piloted by Major Henry J. Deutschendorf Jr., flew the 2,000-kilometer (about 1,242 miles) course at 1,061 mph with a payload of 2,000 kilograms (about 4,400 pounds).

Jan. 14, B-58 No. 441 of the same squadron, piloted by Major Harold E. Confer, flew the 1,000-kilometer course at 1,284 mph with a 2,000-kilogram payload.

The flights set new records for the distances in the "2,000-kilogram payload" category and were so superior to previous marks that in so doing they also established new records in the "no payload" and "1,000-kilogram" categories.

Of the six records set, five were formerly held by the Russians.

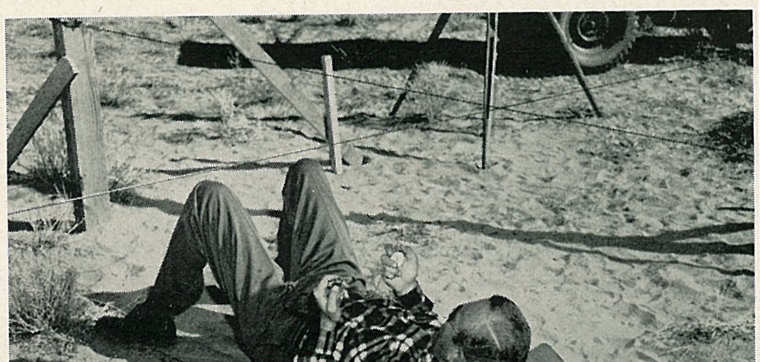
The Hustler competed over a difficult tear-shaped course, involving one 180-degree turn on the short course and three such turns on the 2,000-kilometer run. Because of the turns, the B-58s actually flew considerably farther than the point to point mileage.

Capt. William L. Polhemus, navigator-bombardier, estimated that the B-58 on the shorter run maintained Mach 2 virtually the entire time.

"On the longer run, considered about 1,242 miles, we actually traveled some 1,328 miles. We dropped our speed only about 40 to 50 mph on the curves . . . Dutch (Maj. Henry J. Deutschendorf, pilot) really poured it on during the second lap. We averaged 1,300 mph."

"The major significance of these record flights is that they have dramatically proved the capabilities of SAC's first operational supersonic bomber," Gen. Thomas S. Power commented at SAC headquarters in Omaha, Neb.

The 1961 Thompson Trophy will be awarded to Major Confer for setting the new world speed record over the 1,000-kilometer course.



OBSERVER—At three points on course NAA observers were flat on backs sighting upward through sets of "cross-hairs" (carefully positioned guy wires) to make certain B-58 didn't cut corners on turns. Here is Charles Tibbetts of NAA.

B-58 Record Breakers Will Appear on TV

Several of Carswell's record-breaking Hustler crewmen were slated for national TV recognition last week.

Maj. Henry J. Deutschendorf Jr. was to make a guest appearance on Ernie Kovak's "Take a Good Look Show" Jan. 26.

Slated for an "audience introduction" on Ed Sullivan's Jan. 29 show were Hustler crewman Maj. Richard H. Weir, Maj. Harold E. Confer, and Capt. H. S. Bialas, and S/Sgt. Chas. Kerce Jr., crew chief on the B-58 which broke the 1,000-kilometer speed run.

Bag Filled by Nitrogen Simulates Outer Space

A small "space capsule" floating through a period of weightlessness (zero-G) while two engineers float along to watch, now helps Convair Astronautics with continuing studies of the behavior of missile fuels in space.

"Outer space" for the test capsule is a room-size bag inflated with nitrogen, carried aboard a specially outfitted Air Force KC-135. Periods of weightlessness up to 30-seconds long are produced as the aircraft is piloted skillfully through an up and down pattern at high altitude.

As the plane noses up sharply, its flight path becomes part of an elliptical orbit about the earth's center. During this period, the capsule is in free-fall—briefly independent of the aircraft in which it is carried.

The capsule itself is a drum-like affair, about two feet in diameter and four feet long, with small high-pressure nitrogen cylinders lashed around its sides. The nitrogen drives a self-contained power system to operate instruments measuring temperatures and pressures, a recorder, and a 16 mm motion picture camera.

The instruments record the effect of weightlessness on a quantity of liquid hydrogen sealed in a "Dewar" (a five-quart glass vacuum bottle) at one end of the capsule.

After takeoff, the engineers enter the rubber-coated nylon bag some 20 feet long and nearly 10 feet in diameter and remain with the capsule during flight. Access is through an air lock, since the nitrogen in the bag must remain oxygen-free to eliminate combustion hazards should liquid hydrogen in the capsule be spilled.

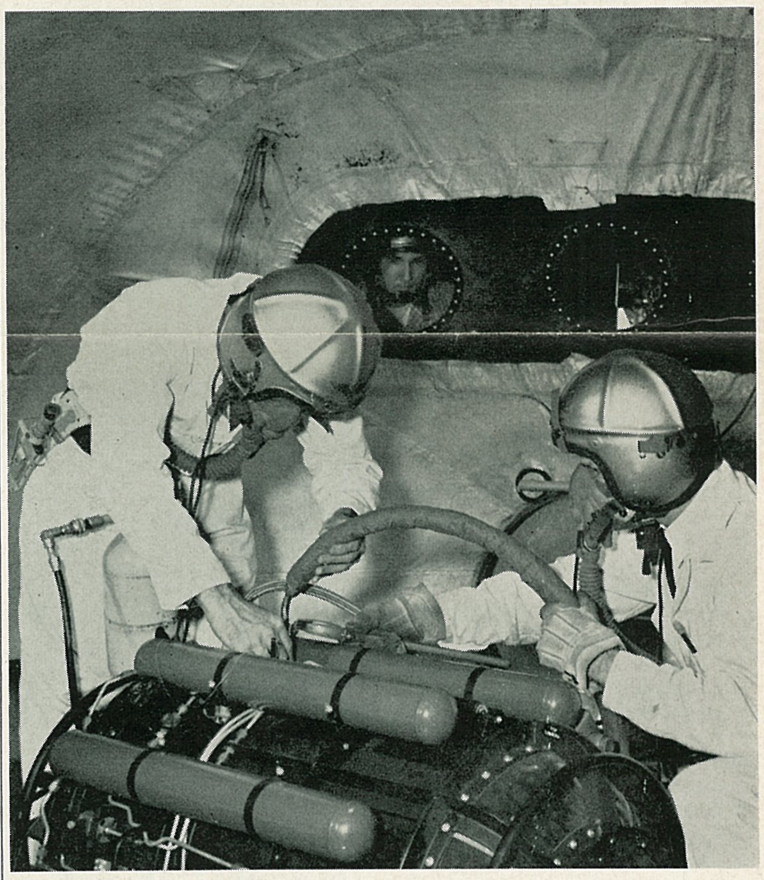
The observers wear flight suits and breathe compressed air fed to their face masks from outside the bag.

As many as 15 tests may be conducted on one flight, and the engineers must remain with the capsule to observe it and to replenish its nitrogen and hydrogen supplies before each test.

To date, flights have been from Wright Air Development Division, Dayton, Ohio.

Results of the zero-G tests are used in support of Astronautics high-energy space-probing Centaur vehicle, and in allied space projects. From data acquired, engineers will learn more about the behavior of liquids in a weightless environment, and about heat transfer and the performance of instruments under these conditions.

Juan Elizalde, Dept. 595-1, and George Wood, instrumentation design supervisor, Dept. 562-1, are key men in these studies. Others contributing to the project's success include Clay Perkins, Joan Sherley and Leif Hansen.



HOOK IT SO—Technician Otis Potter watches through observation port as engineers refill nitrogen cylinder on capsule.

Astronautics Ranks in First 20 In Fire Prevention Contest

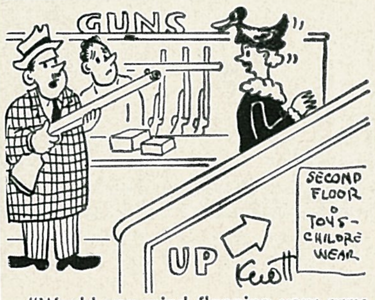
Convair Astronautics has been ranked 18th in the 1960 international fire prevention contest (industrial division) sponsored in the United States and Canada by the National Fire Prevention Association.

Of the 113 organizations competing in the industrial division, Astronautics is the only missile and airframe manufacturer to be ranked among the top 20.

Contest judging was based on five areas of fire prevention and included inspections, fire brigade activities, employee fire control education, fire prevention week program, and results.

"The cooperation and interest shown by all Astronautics employees played a major role in our receipt of this honor," said A. C. Anderson, fire chief. "It is an accomplishment in which each can take pride, and which can pave the way to greater achievements in the future."

Astronautics' part in each area of contest judging was described in a handsome illustrated book prepared by Anderson and Fire Lt. J. P. White, which accompanied the entry.



"Would you mind flapping your arms, Madam?"

Texas Instruments Toured by FW Club

Approximately 100 members of FW's Management Club were guests of Texas Instruments, Dallas, for a tour of the Dallas plant Friday.

Of special interest on the tour was Texas Instruments' automatic testing device involving 21 operations of sorting, testing and classifying parts; automatic alloying, automatic operation of stamping, assembly and classifying via closed circuit TV.

C-V CONVAIR

Published every other Wednesday.

GD GENERAL DYNAMICS

Convair Division of General Dynamics Corporation.

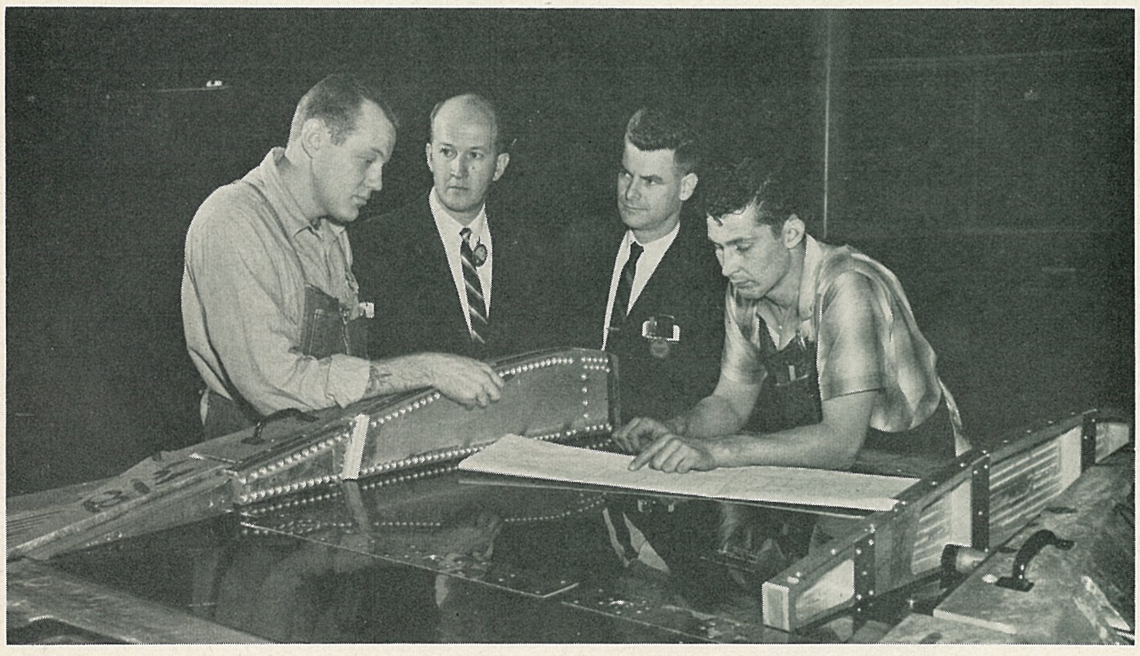
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San Diego
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EDITION

San Diego news office: Plant 1, Bldg. 32, ext. 1071.

Vol. 14, No. 4 Wednesday, February 15, 1961

SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.



200TH GRADUATE—W. J. Ryan (at far right), 200th graduate of Convair SD apprentice program, shown at fixture in tool and die shop, Plant 1, with (from left) Roger Dierking, soon to graduate; L. W. Turner, educational services coordinator, and F. N. Shepard, Dept. 401 foreman, both former SD apprentices.

Mountain Tract Bought by CRA For Recreation

Purchase by Convair San Diego Recreation Association of a 51½-acre parcel of land some 60 miles from San Diego, was announced last week by James K. Field, SD chief of employee services.

The area, situated on Route 79 between Julian and Cuyamaca and directly across the highway from Inspiration Point, will be improved during the next few months as a major recreation and camping facility to be used by Convair San Diego families.

Located on the land is a pure-water well and many pine, oak and cedar trees. Work will get under way next month to install utilities, grade roads and put up fences.

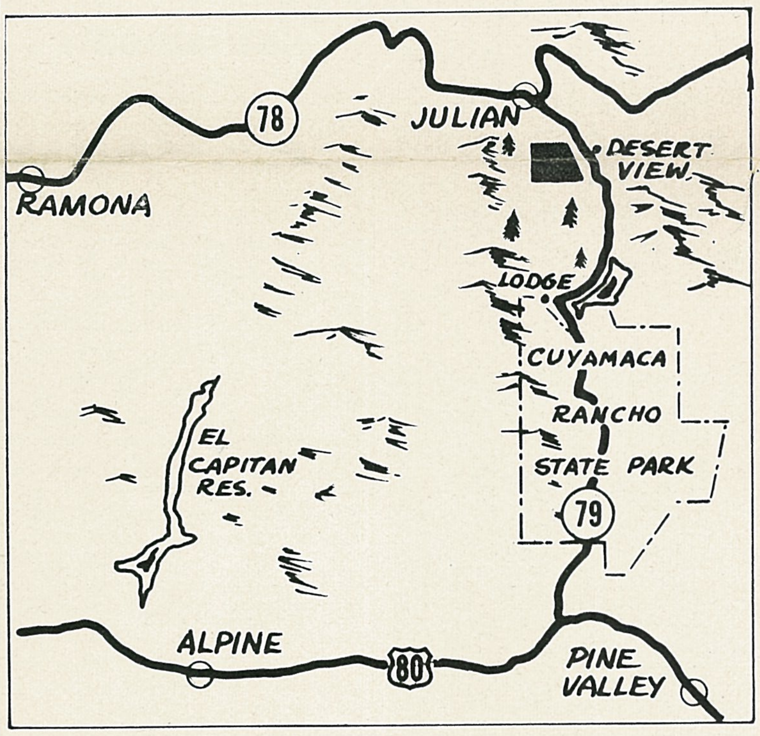
Major use of the facility is expected to be for camping purposes but plans are being made to include hiking trails, a fishing pond for children, and in winter, a toboggan slide and short ski run.

The acquisition was prompted in part by the fact that numerous requests had been received from Convair persons who wished to camp weekends at Pecan Park, which is primarily a picnic area.

CRA also pointed out that nearly all of the camping spots in San Diego County are becoming increasingly more crowded.

The fact that the land is located within an easy drive of such popular spots as Lake Henshaw, Palomar Mountain and Warner Hot Springs was another reason for its selection, Field said.

The new recreation area will be the third major facility operated by Convair SD Recreation Association for the enjoyment of employees. The others are Pecan Park and Gillespie Field, the latter being used primarily for Gun Club shoots and as a meeting place for various CRA clubs.



WOODLAND RETREAT—New CRA recreation area is three miles from Julian, across highway from "Desert View" or "Inspiration Point."

Direct Lines Link Convair And TWA Base

Direct communication lines now connect Convair plant at San Diego, home of Convair jet transports, and Trans World Airlines maintenance base at Kansas City, Mo., to keep Convair SD fully informed on day-by-day 880 operations.

L. J. Bordelon, chief of SD transport service, said that the maintenance private line telephone system originating from TWA's control center at Mid-Continent International Airport will allow direct and immediate contact for support of 880s now in TWA passenger service.

"The newly-installed system augments existing communication facilities with all airlines now flying Convair 880s," he explained. "We are in constant touch with Delta Air Lines, Northeast Airlines, and TWA operations via daily phone briefing sessions and direct telegraphic messages through the General Dynamics switching network. In addition, wire messages from TWA are received directly over a teletype installed in the transport service engineering area."

Installed in strategic areas throughout the plant for the new TWA direct line service are five receivers similar to small radios (commonly known as "squawk boxes"). They are spotted in Bordelon's office, Bldg. 19; transport service engineering area second floor, Bldg. 19; commercial section of service parts, Bldg. 4; jet transport project office, Bldg. 5; and chart room in Bldg. 1, Plant 1. One is also in the office of Henry Bohmbach, senior field service representative at TWA's Kansas City headquarters.

By turning on the receivers, listeners can hear daily general 880 briefings and flight debriefings at time of clearance of planes for scheduled flights.

Special telephones permit Convair San Diego people to dial any TWA station at airports west of Kansas City directly or to listen in on two-way conversations between the Kansas City PLF (private line phone) control center and other bases. The control center can connect East-West lines to switch conversations to airport maintenance bases in the eastern section of the country.

The TWA maintenance control center at Kansas City connects most of TWA's 65 bases in the airline's domestic network.

200th Apprentice at SD Handed His Certificate

Convair San Diego handed out its 200th journeyman's certificate recently when W. J. Ryan, now in SD tool and die shop, joined the ranks of graduates from the company's continuing apprenticeship program.

Since 1942, when the training was started in Convair SD, the company has been a forerunner among industries helping young men learn a trade. There are around 40 apprentices now in training at San Diego. Astronautics currently has 19 under a similar program.

First graduate in 1946 was W. E. Gilbert, no longer with the company. Two finished in spring of 1947 — T. E. Hughes, a SD tool designer, and W. S. Sherman, now with Astro as a tool processor.

"Our apprentice training is open only to young men who can maintain the highest standards of scholarship and on-the-job production," said H. W. Rubottom, chief of SD educational services which administers the program.

"Our waiting list is so long that a boy usually has to wait a year to get in, and then pass stringent aptitude and scholastic tests before he's accepted."

A few, rarely more than five or six, are added at the beginning of a school semester to correlate on-the-job training with required technical courses at San Diego Junior College. Convair is one of the few companies sending their apprentices to school on company time. During the 8,000 hours they put in during the four-year training course, they receive 40 units of technical classes and are expected to take additional classes, (20 units of English, political science, psychology, etc.) on their own.

"Applicants must be 17 years of age and no older than 26, high

(Continued on Page 2)

Qualifying Tests For Scholarships Set This Spring

Sons and daughters of Convair employees in the San Diego area intending to apply for 1962 General Dynamics Merit Scholarships must take National Merit Scholarship qualifying exams this spring, reminded J. L. Budros, assistant to Convair vice president-administration.

Children, both boys and girls, of Convair parents who have been with the company two consecutive years are eligible for General Dynamics scholarships which replace former Convair Sons Scholarships. Six will go to Convair winners.

Administered under the National Merit Scholarship organization, qualifying tests are given each spring, usually in March, for high school juniors. Scholarship amounts range from $250 to $6,000, divided over four years of college work.

Convair SD employees may contact M. M. Saunders of SD educational services, ext. 1827, Plant 1, for information and full details.

Naish to Make Award Tonight

Convair President J. V. Naish is scheduled to present the 1960 President's Award at tonight's (Feb. 15) meeting of Convair SD Management Club in the El Cortez Hotel Caribbean Room.

Fifteen flat-salaried men are in the running for the award, top annual cost-reduction honor. Last year, through the Cost Improvement Proposal program, they alone saved the company more than $600,000.

Principal speaker at tonight's meeting will be the chief of police of Salt Lake City and author of "The Naked Communist," W. Cleon Skousen. His topic will be "Can the West Win?"

A limited number of tickets, priced at $2.50 will be available at the door. The menu will offer choice of meat or fish.

990 Flight Covers Quickly Sold Out

Commemorative first-flight covers of the 990 were sold out less than two hours after the Convairiety announcement hit the street.

But other first-flight covers are now available of special interest to collectors.

Taken out of storage and available at employee services, Plant 1, for 25c each, are first-flight covers of the Convair XP5Y-1 (April 18, 1950), Convair Turboliner (Dec. 29, 1950), and Convair-Liner 340 (Oct. 5, 1951).

There are also covers still on hand from first flight of the Convair 880, Jan. 27, 1959.

Gen. Dynamics Creates An Electronics Division With 11,000 Employees

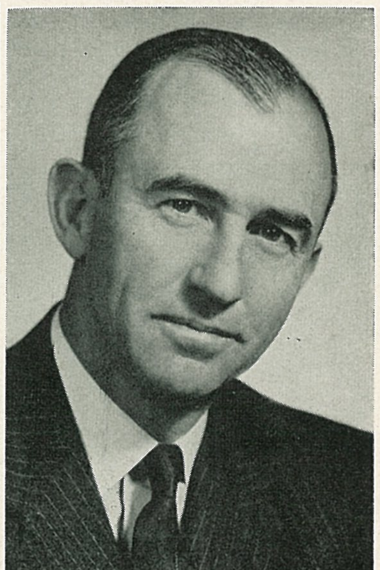
Creation of a new division, General Dynamics/Electronics, was announced late last month by Frank Pace Jr., chairman of General Dynamics Corporation.

The new division will consolidate separable electronics activities formerly spread among several divisions and will absorb the former Stromberg-Carlson division in its entirety.

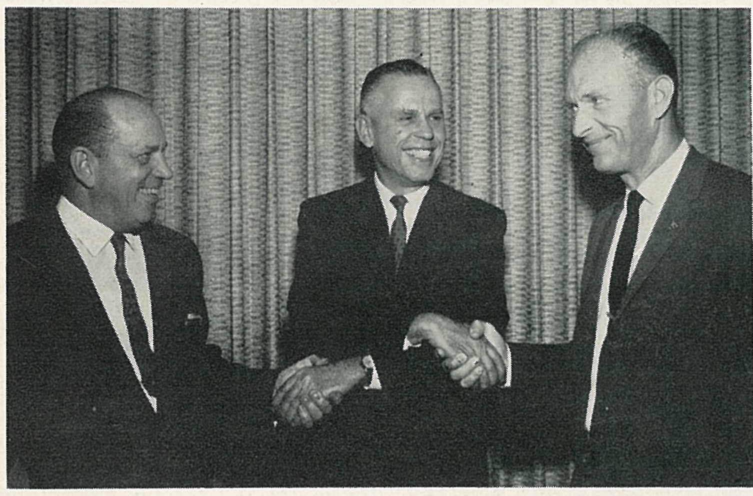
A substantial part of Convair SD's Dept. 7 will be affected and Convair Instruments personnel already have been transferred. There were no indications that other Convair operating divisions would be immediately involved, however. SD Dept. 7 has personnel numbering about 935.

Pace pointed out that electronic equipment is an integral part of aircraft, submarines, missiles and space vehicles. Products, facilities and personnel to be transferred, he said, have been se-

(Continued on Page 2)



Frank Pace





CONGRATULATIONS—In left photo, R. C. Sebold, Convair vice president-engineering, gives hand clasp to J. H. Famme, left, and R. L. Bayless, both General Office Dept. 1-71, as they complete 25 years service. In right photo, R. C. Loomis, vice president and San Diego manager, has just awarded 25-year service emblems to H. G. Rote, Dept. 100, left, and H. D. Hershey, Dept. 133. At extreme right is F. W. Bornemann, Dept. 188, who celebrated his 30th Convair anniversary.

Leo Bourdon, 74, Sr. Citizen, Dies

Leo Bourdon, Convair's most senior citizen with more than 35 years of company service, died at his San Diego home Feb. 7 at the age of 74.

Entombment was in Holy Cross Mausoleum Feb. 9.

Bourdon, who retired from Convair in March of 1959, is survived by his wife, Catherine; a son, Bernard, who works in Dept. 292 at Convair SD; two sisters; and two brothers.

His aircraft career went back beyond the time Consolidated was formed May 29, 1923, and he was the first Convair employee to receive a 35-year pin.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Feb. 1 through Feb. 15.

Thirty-year: Dept. 31, E. H. Roeckel; Dept. 149, L. V. Denny.

Twenty-five-year: Dept. 6, A. A. Fabbri, R. R. Hoover, R. T. Le Vine; Dept. 190-5, W. H. Evans.

Twenty-year: Dept. 6, J. M. Adamson, L. J. Koenig, V. S. Mathews, W. A. Thirion; Dept. 7, V. L. Akers, A. M. Mendez; Dept. 14, E. R. Cash; Dept. 25, B. E. Ahring, Bert Shapins, O. C. Touchstone; Dept. 31, Lowell Hudson, W. C. Willenborg; Dept. 100, G. E. Armstrong; Dept. 292-8, J. M. Cooney; Dept. 400-2, W. P. Espinosa.

Fifteen-year: Dept. 6, J. H. Hood; Dept. 7, Esther L. Durk; Dept. 15-6, Rosalie A. Baker; Dept. 25, E. E. Coppinger; Dept. 141, Alice B. Ferguson; Dept. 148, George Artiaga; Dept. 188, J. R. Gluyas Jr.; Dept. 192, N. L. Megargee; Dept. 280, V. H. Whorlow; Dept. 401, V. H. Ericsson, S. G. Harter.

Ten-year: Dept. 3-1, K. H. James; Dept. 6, R. W. Adkins, H. H. Amtmann, J. E. Benson, G. E. Hansen, F. M. Nagy, J. L. Phipps, W. A. Ray, R. F. Shard, Elizabeth E. Shelton, Loretta W. Vaughan; Dept. 7, Mildred P. Buffat, L. R. Janicki, R. A. Kenyon, R. P. Noisat, Edith L. Wight.

Dept. 14-4, Florence A. Norris; Dept. 15, Hazel C. Herring, E. L. Mackay; Dept. 21, R. W. Tyler; Dept. 25, B. A. Chmidling, D. E. Logan; Dept. 31, D. L. Anderson, P. A. Di Leo, Katherine Gilardo, M. C. Morales, F. C. Viviani; Dept. 44, Mildred T. Fowler, Evelyn B. Kellogg, Virginia M. Lopez.

Dept. 91, Zena K. Flores, Dorothea H. Miley; Dept. 98, Margaret H. Martin; Dept. 101, Natalia M. Barrett, Iva H. Hagen, Marie D. Willbanks; Dept. 102, Claudia E. Rogers; Dept. 115, Irene H. Early, L. H. Roberts; Dept. 120, Katherine W. McMillen.

Dept. 129, Frank Cruz, E. A. Hunter, Evelyn M. S. Lepper, Evelyn B. Madruga, Lillian H. Owens, Aida M. Pugh; Dept. 133, Rosalia W. Kimmerling, M. R. Ranzoni, L. J. Smith; Dept. 135, M. R. Barnhart; Dept. 136, T. M. Ranzoni; Dept. 137, S. J. Espinoza, E. B. Gardner; Dept. 138, R. J. McCulloch, J. D. Wooten; Dept. 139, W. A. Rathfon, E. L. Robinson.

Dept. 140, L. A. Montez; Dept. 141, Richard Welk; Dept. 142, Elizabeth M. Lewis; Dept. 144, R. D. Mangels; Dept. 146, J. H. Sargent; Dept. 148, Margaret B. Lacey, Katherine W. McConnohie; Dept. 160, B. H. Henry, W. H. Reinhardt, Wayne Willett; Dept. 180, C. E. Giveans Jr.; Dept. 188, W. R. Haines, Ethel M. Myers; Dept. 190, Germaine S. Culey.

Dept. 192, La Verne M. Ciolak, Irene H. Francis, D. R. Warburton, Gayle O. Watts; Dept. 197, Rose M. Papa, H. W. Trafton, G. W. Wilcox; Dept. 201, Glenna L. Barlow, L. L. Begley, E. A. Collins, M. M. Martinez; Dept. 204, M. W. Logan; Dept. 206, J. A. Cook, Mavarette D. Hodges.

Dept. 217, Rose M. Costantino; Dept. 218, Estelle D. Banach, Angeline V. Campanella, D. V. Greenlee, Florence M. Kell; Dept. 223, Rosa Knowles, M. M. Rios; Dept. 232, Ernestine C. Lomax; Dept. 233, W. E. Ash Jr.; Dept. 249, Mary E. Grow, Cleo F. Monji, Gladys V. Shipley, Peggy J. Vander Wyst.

Dept. 267, Tommy Hayes Jr.; Dept. 271, R. J. Sunder; Dept. 288, W. W. Graham, Marie H. Peterson, Alice B. Van Der Linden, Esther R. Wilson; Dept. 292, Arden E. Stone, Alice S. De Vault; Dept. 400, Eva M. Christensen, D. O. Gerde, R. B. Powers; Dept. 401, Harry Anderson, J. V. Dolan, W. H. Howe, C. F. McKeown, Lois G. Medina.

HOLLOMAN AFB

Ten-year: Dept. 313-5, R. J. Gumb.

PALMDALE

Ten-year: Dept. 321-1, B. G. Huse.

Deaths

SAN DIEGO

DOANE—John E., Dept. 180. Died Jan. 31. Survived by wife, Margaret; children, Lynn and Crystal Doane; sister; two brothers.

SCHURRER—Anton J., Dept. 14-7. Died Feb. 4. Survived by wife, Martha Schurrer; brother; and sister.

Promotions

SAN DIEGO

Promotions to or within supervision effective Jan. 30.

Dept. 7, Electronics: To tooling asst. supervisor, G. D. Patrick. To M/C asst. foreman, D. L. Anderson. To asst. foreman, F. E. Maus, C. B. Vinson.

Dept. 31, Experimental: To asst. foreman, K. R. Abbott, R. E. Bowman.

Dept. 119, Metal Bond Fabrication & Assembly: To asst. foreman, G. E. Armstrong.

Dept. 138, Jet Transport Forward Fuselage Primary: To asst. foreman, E. D. Brannon.

Dept. 141, Jet Transport Delivery Preparation: To asst. foreman, J. H. Bradshaw, J. J. Medina, W. B. Sanford.

Dept. 146, Jet Transport Wing Primary & Wing Mate: To asst. foreman, H. E. Collins.

Dept. 192-2, Manufacturing Control, Plant 1: To M/C asst. foreman, C. G. Stevenson.

Dept. 197-1, Quality Control: To inspection asst. supervisor, J. R. Dressler.

Dept. 223, Welding: To asst. foreman, W. L. Berkheimer.

Dept. 292, Manufacturing Control, Plant 2: To M/C general foreman, T. E. Morris. To M/C asst. foreman, J. S. Scalisi.

Retirements

SAN DIEGO

Retirements during the period Jan. 16 through Jan. 31.

Dept. 6-17, J. L. Perkins; Dept. 14, S. R. Stager, R. M. Tidball; Dept. 15-6, John Tuniga, W. J. Willoughby; Dept. 25, J. G. King, P. P. Maher, W. E. Shoen, Antonio Smith, B. W. Stradley, J. W. Wilson, H. J. Wright.

Dept. 31, J. F. Woodard; Dept. 44-3, M. F. Skoglund; Dept. 99, Edward Litke, W. T. McGee, L. A. Rawson, J. W. Scherkenback; Dept. 101, E. A. Buckman, J. B. Shanks; Dept. 115, Gustavo Alarcon, C. O. Van Denburg, C. A. Yackels; Dept. 116, Bernice M. Falkenthal, E. A. Tillman.

Dept. 129, J. T. Taylor, O. J. Thompson; Dept. 140, W. J. Witaszak; Dept. 143, H. W. Simpson; Dept. 149, S. L. Wight; Dept. 180-0, S. F. Smith; Dept. 188, W. B. McNicol; Dept. 192, E. J. Pantera, George Vlahos, F. C. Whistler; Dept. 197, H. M. Simpson.

Dept. 204, H. C. Shurtz; Dept. 215, E. L. Willis; Dept. 218-0, J. P. Zimmer; Dept. 233, Paul Tarditi; Dept. 288-2, W. L. Temple; Dept. 292-3, F. H. Tschirgi; Dept. 400, J. E. Malloy, G. A. Seiler; Dept. 401, S. A. Morris, Josephine S. Solomon, J. W. Thatcher, J. H. Thomas, D. D. Trout, H. M. Van Zandt, Stanley Wajda, R. F. Webber, John Williamson, J. E. Wood, A. E. Yates, R. A. Yeager.

Births

SAN DIEGO

ASHTON—Son, Donald Thomas, 7 lbs., 6 oz., born Jan. 23 to Mr. and Mrs. Donald Ashton, Dept. 197-4.

Combat Art Show Slated Feb. 7-19

Convair employees in the San Diego area have been extended a special invitation to view the famed U.S. Navy traveling display of combat art Feb. 7 through 19.

This display, featuring work by top-ranked artists, will be exhibited at the Fine Arts Gallery, Balboa Park. There is no charge for admission.

The display includes 120 paintings and drawings selected from 3,000 pieces of art painted by combat artists during World War II, Korea and through 1955.

★ Convairiety ★

Founded Sept. 1, 1948. Published in six editions (Fort Worth-Daingerfield, San Diego-Palmdale-Holloman, Astronautics, Astronautics Off-Site, Pomona and the Mail) by Convair Industrial Relations, General Office, San Diego, Calif. Logan Jenkins, editor-in-chief.

Approximate current total circulation, over 70,000. News items and letters to the editor are solicited, but no advertising can be accepted.

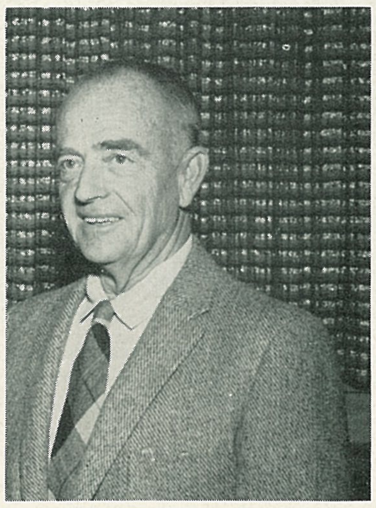
SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.



RECOGNIZED—W. C. Bowlen, Dept. 400-1, another Convair veteran, last month was honored for 25 years service.

GD Electronics Division Formed, 11,000 Involved

(Continued from Page 1)

lected carefully to avoid eroding research, engineering and manufacturing capabilities essential to primary military products. Systems and components integral to these major weapons remain with the original divisions.

James D. McLean, president and general manager of Stromberg-Carlson, has been named president of General Dynamics/Electronics. The division will continue its manufacturing and research in existing facilities in Rochester, N. Y., San Diego and Los Angeles. Employment totals over 11,000. There will be four operating divisions: Commercial Products, Telecommunications, Military Products and Information Technology.



James D. McLean

Personnel from Convair SD's Dept. 7 will join the Military Products Division, while Convair Instruments joins Information Technology.

Convair President J. V. Naish announced that systems electronics capability will be retained or provided in each of Convair's operating divisions in support of aerospace vehicles and missiles and that each would pursue its own applied research in the field of integral systems electronics.

"The electronics industry has shown the greatest growth of any major industry over the past 20 years," President McLean said in commenting on prospects of the new division. "It should continue to grow and General Dynamics/Electronics can expect to share proportionately."

Research will be expanded in the new division, Pace said, with emphasis upon studies in infrared technology, information display, systems and operations research. Slated for immediate expansion are data handling, process controls and instrumentation.

200th Convair SD Apprentice Gets Journeyman Certificate

(Continued from Page 1)

school graduates, mechanically inclined, and able to benefit from the training," explained L. W. Turner who coordinates the program for educational services.

Trades offered are aircraft electrician, aircraft tool and die maker and jig builder, airframe and powerplant mechanic, aircraft electronics technician, plaster pattern maker, industrial electrician.

During the training, apprentices work on the job under close supervision of journeymen or supervisors, earn while they learn with regular six-month pay raises, and get college-level education at the same time.

"Graduates from the apprentice program have twice the chance to go higher up the ladder than other workers. More than half of Convair's graduates have gone on to higher jobs with many in supervision. In fact, there's no limit to possibilities for advancement in their chosen trade," continued Turner, himself a former apprentice made good. (He received his journeyman electrician's certificate with the "class of 1951" and went on to become a training specialist in educational services.)

"Also, apprentices' work records are especially good. Absenteeism is five times less than the all-over plant average."

Very few quit the program once they've begun. Of the few who dropped the training before their four years were up, most were called into military training or returned to school.

When they finish the four-year training, apprentices receive a journeyman's certificate from Convair, a certificate from the California Apprenticeship Council, and Associate of Arts degree from Junior College. A special ceremony is held each spring for the entire group completing the program during the year. At the same time announcement is made of the outstanding apprentice for the year.

Largest group, 25, finished last year, and second largest number at one time, 20, will graduate this year, said Turner.

"We are extremely proud of our apprenticeship program and its results," stressed Rubottom, who heads both joint apprenticeship committees made up of company and union representatives. "Apprenticeship is the universal time-tested way to provide all-around trained workers to meet production and defense needs and to perpetuate skills of the craft."

Wolfe and Elliott Assume New Posts

Personnel changes recently at Convair San Diego saw shifts of responsibilities within service parts department and factory organization.

H. E. Wolfe is now general supervisor, military service parts; and W. T. Elliott succeeds Wolfe as general supervisor, commercial service parts. Both report directly to John Doig, chief of service parts.

H. G. Rote is superintendent, jet transport, for electric bench, tubing and cable, mockup and C. I. B. representative, according to an announcement by Conrad Kunze, assistant manager operations.

E. D. Robinson is superintendent, jet transport, for forward fuselage, major mate, final assembly, flight test preparation.

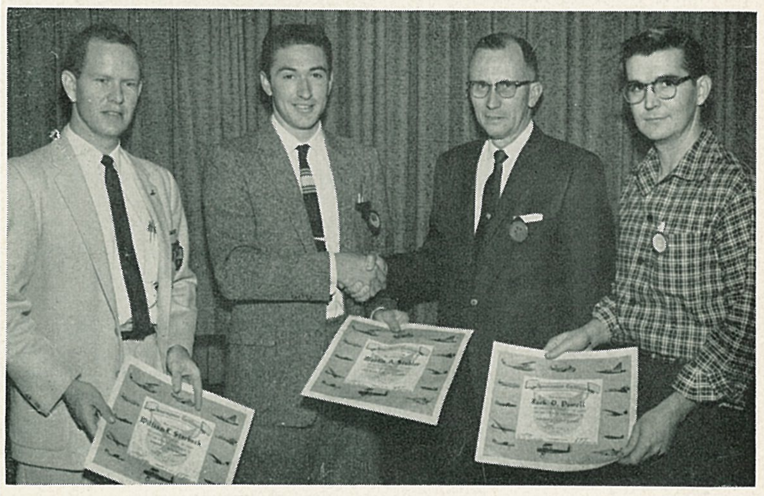
Convair Veterans Given New Posts

Two veteran Convair men, both formerly of Convair SD, are in new posts at Astronautics and Fort Worth.

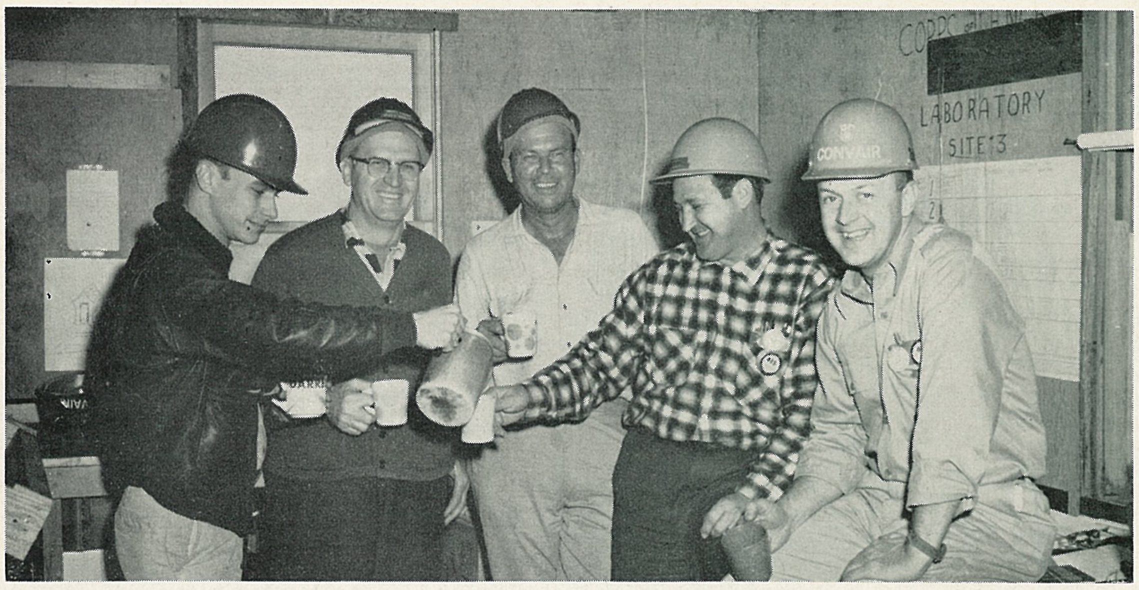
C. C. Flagg, who served for years at SD beginning in 1935, has transferred from Convair FW to become Astro's chief of inspection. O. R. Goode, who joined Convair at SD in 1941, has been named chief of inspection—modernization at FW.

Values of Education Discussed For P.T.A.

F. V. Anderson of Convair SD educational services spoke on the value of higher education at the Feb. 7 meeting of the Carlsbad High School P.T.A. Developing his subject, "Playing for Keeps," Anderson outlined advantages of high school and college degrees and types of jobs and careers open to young people with different levels of education.



ON THE WAY UP—Three more Convair SD apprentices get journeyman's certificates from Conrad Kunze, assistant manager, (from left) William Starbuck, Dept. 15 engineering writer; Martin Stuhler, Dept. 7 tool designer; Kunze; Jack Powell, instrumentation technician at Astro's Sycamore site.



SURVEILLANCE—These men at Schilling AFB, Kan., Site 3 are typical of Astronautics surveillance teams on duty at hard bases. From left, D. E. O'Neal, K. B. Fielder, W. H. Hodges, H. W. Ritter and R. G. Finley, team captain.

Astro Fieldmen

Team of Five at Schilling's Site No. 3 Typical of Surveillance Activities

CARLTON, KAN.—From a vantage point in this small Kansas farm community you can see, on high ground about three miles away, construction activities on an underground launch site for the Atlas missile.

This is Site 3, one of 12 launch sites being added for nearby Schilling AFB. In missile terminology it is a "hard" or "silo" site. All launch and control equipment will be stored below ground with the missile being raised vertically to the surface for firing.

In the weeks ahead about 50 Convair Astronautics employees will work here, installing and checking out Atlas equipment. At present, however, there are only five.

This is an Astronautics surveillance team, typical of 71 other such teams now on duty across the nation. These men work closely with the Army Corps of Engineers and with prime construction contractors. Their office is a plywood shack attached to a similar one used by Army representatives.

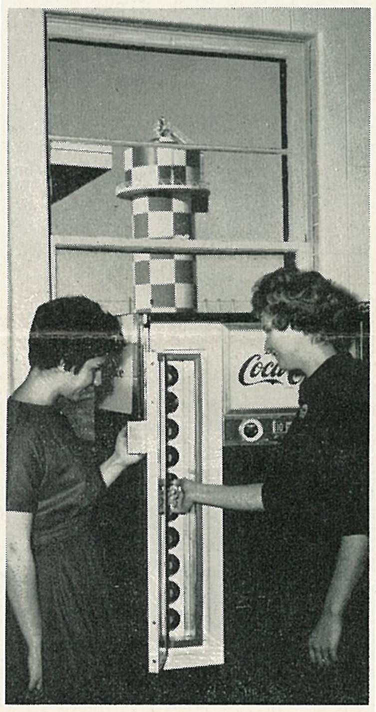
One of their major tasks is positioning certain fixtures. There is no margin for variation in this maneuver. Optical tooling devices make it possible to follow tolerances to the closest thousandths of an inch.

(Construction men, accustomed to easier standards, often marvel at the exactness of their work.)

R. G. Finley is Astro's team captain at Site 3. He is a plant engineer who has been on duty since the first earth was turned at the site last summer. A native of nearby Salina, Kan., he is the father of three youngsters.

H. W. Ritter, a planner, is alternate captain. He formerly worked at Convair Pomona and joined this team last August. His wife and two children reside with him in Salina.

D. E. O'Neal is a quality control representative at work here since last August. He was hired in San Diego and spent a month in special training for this assignment. His wife and one child came with him to a new home in Salina.



LANDMARK — Seen through window is water tower near Astro quarters at Schilling AFB which serves as direction mark. Girls are Franca Ghielmetti and Dorothy Kissick.

K. B. Fielder and W. H. Hodges are optical tooling men who once worked for Convair San Diego. Both came here last September. Fielder was raised in Wichita, Kan. He now lives with his wife and three of his four children in Abilene. A fourth son is a student at San Diego Junior College. Fielder worked on fabrication of Atlas missile launchers at both Astro's main plant and Convair SD.

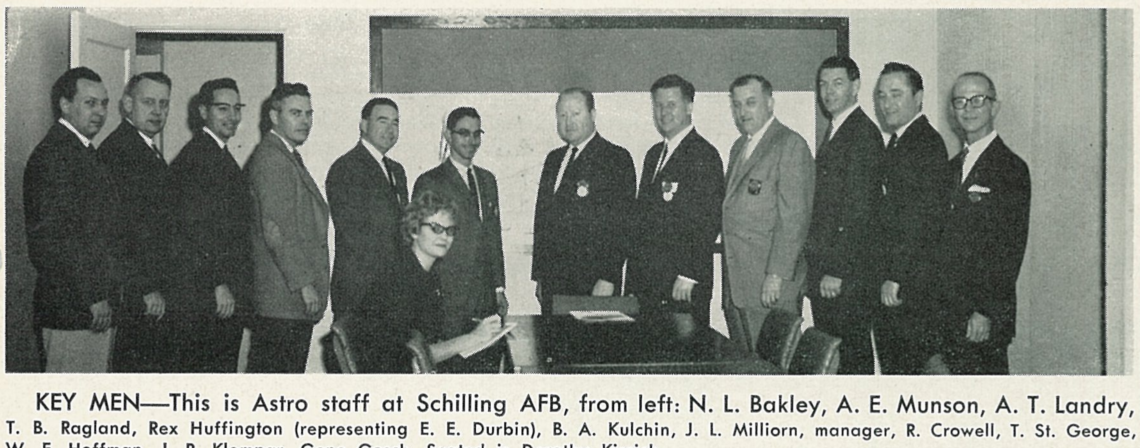
Hodges was a Convair SD plaster pattern maker for seven years. His wife now works in Dept. 406 at Convair SD, while Hodges maintains "bachelor" quarters in Abilene.

Each of the men drive the 25 miles each way to and from work.

The team is at home with all equipment being installed in the silo, as well as that to come. They rattle off technical names as quickly as they scamper up and down the silo's 100-foot spiral staircase.

One of their frequent jobs is to guide "site-seers," visitors who are seeing the site on official business. Each must be cleared with construction safety crews and equipped with a hard hat.

While the men sometimes drive into Carlton for lunch, most of the time they eat at the site. Sometimes during lunch hour they fish in a nearby farm pond.



KEY MEN—This is Astro staff at Schilling AFB, from left: N. L. Bakley, A. E. Munson, A. T. Landry, T. B. Ragland, Rex Huffington (representing E. E. Durbin), B. A. Kulchin, J. L. Milliorn, manager, R. Crowell, T. St. George, W. E. Hoffman, J. R. Klompar, Gene Gosch. Seated is Dorothy Kissick.

Astro's Population Grows at Schilling, First of 'Hard' Sites

SCHILLING AFB—Astronautics employment has started an upward spiral at this first Air Force base to be equipped with underground (silo) launch facilities for the Atlas missile.

J. L. Milliorn heads the Astro work force as Convair operations manager. He reports to J. W. Petre, Astro's base activation manager for "F" series or "hard" sites.

In addition, this installation will be among the first to receive larger numbers of Astro employees transferring from other bases as they begin to phase out their work programs.

Twelve Atlas launch sites are currently in various stages of construction in areas surrounding this central Kansas community. Each is called a "site" and is designated by a number, ranging from one to 12.

Astro's operation at each site at present calls for surveillance by a normal team of five employees.

An interconnection radio-telephone system permits sites to communicate with one another or direct to Milliorn's office at Schilling AFB.

For better coordination of tasks at hand, Milliorn's operation at the site level is further divided into complexes, designated A, B and C. Each complex consists of four launch sites located nearest each other geographically.

On-base Astro facilities consist of a group of administrative and office areas. In time, personnel also will be working in the Squadron Maintenance Area, a support unit composed of three separate buildings. These are the Missile Assembly building, the Munition Section Strategic Missile Squadron structure and the Administration and Storage building. Each will provide support to squadrons manning Atlas missile sites.

Because launch positions here at Schilling are the first of the underground type, they will, in a large sense, be a "proving ground" for those to follow, Milliorn said.

"We must rely heavily upon personnel at the main plant and other locations for rigid support and quick follow-up on problems originating here," Milliorn said.

Milliorn indicated that an excellent relationship currently prevails between Astro forces and base personnel as well as civilians in nearby Salina, Kan. Schilling is an established medium bomber base operated by the Strategic Air Command.

Astro employees enjoy use of such on-base facilities as the Officers and NCO Clubs as well as recreational facilities.

At present after-hours activities emphasize indoor events. B. A. Kulchin, chief of industrial relations here, indicated a full-scale recreational program for all ages is being planned. Meanwhile, sports include a bowling league.

Industrial relations also keeps an up-to-date listing of available housing for incoming personnel.

In addition to Milliorn and Kulchin, key supervisory posts are being filled by: W. E. Hoffman, chief of production control; T. B. Ragland, contracts administrator; T. St. George, chief of material; A. T. Landry, chief of site operations; E. E. Durbin, chief of quality control; N. L. Bakley, chief of cost control; Gene Gosch, communication representative; J. R. Klompar, chief of complex A; R. T. Crowell, chief of task control; and A. E. Munson, design group engineer.

Missile Silos Underground 174 Ft. Deep

SCHILLING AFB—Silos are commonplace in this grain-producing area of Kansas, but an entirely new type—all underground—is being added for the Atlas missile.

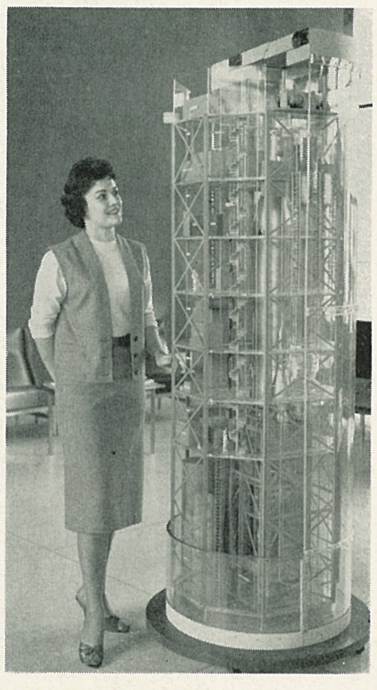
The similarity of the two, tall cylinders, has led to the common dubbing of these missile launching sites as silos. In official terminology they are "hard" sites. That is, the missile and its equipment are stored in a hard state underground and brought to the surface only for firing.

Schilling AFB is the first of six Strategic Air Command bases destined to receive such sites. Each base will have 12 launch sites, widely dispersed.

Each site consists of two major structures, the silo for the missile and most of its ground support equipment and a launch control center (LCC) located about 100 feet away, all below surface.

Silos are 174 feet deep and 52 feet in diameter. Their concrete walls vary from two to nine feet in thickness, depending upon soil conditions.

Once finished, the reinforced walls can withstand pressures of up to 3,500 pounds per square inch!



UNDERGROUND—Nancy Williams, Astronautics receptionist, inspects 1/20 scale mockup of Atlas silo which gives some idea of what "hard" sites will be like.



SETTLING DOWN—Astro folk are moving in at Schilling AFB. At left is security office where Art Ashfield snaps photo of Nurse H. V. Schleicher as Kay Stanley shows application to Capt. J. H. Dunn of guard force. Second from left are Wanda Wilson, Margy Butler and Ruth Carter, among first of secretaries hired locally. Second from right shows J. L. Milliorn, Astro base manager, J. R. Klompar, chief of launch complex A. At right Dennis Company, Bob Stegman, Bob Woods and Bob Williams assign furniture.

Part Time Public Servants Include Eight Mayors of FW Communities

Final assembling a B-58 finds J. O. Hood and N. T. Childres in complete agreement. Both veteran Convair Fort Worth employees work in Dept. 58 (final assembly), although on different shifts.

But as mayors of their respective home communities, they're miles apart in their aims for their cities.

Hood, mayor of Westworth, in the shadow of Convair's plant, explains that his city is "entirely one of residences — and we want to keep it that way."

Childres, mayor of Kennedale, says his community is going all-out to attract commerce and industry.

Hood and Childres are typical of the hundreds of Convair employees who spend countless off-time hours as civic workers. Dozens are mayors, aldermen or city councilmen in the Fort Worth metropolitan area.

Others serve as judges, or on city tax equalization boards, planning and zoning committees, water and sewer authorities, and as reserve policemen. At least one is electrical inspector for his city.

Childres, Convair assembler since 1945, has served as Kennedale's mayor the past five years.

He is proud of such reecnt Kennedale progress as a new $290,000 sewer system, the city-operated waterworks, and natural gas lines installed a few years ago. Kennedale's population is 1,512.

Mayor Hood, supervisor in final assembly, has worked at Convair 18 years. His "city of homes" (there's only one commercial establishment in the city limits) has a population of 3,820. When Westworth was incorporated in 1941, population was little over 200.

Other mayors or mayors pro tem who work at Convair FW include: J. B. Haden, Dept. 6-4, pro tem, Haltom City; G. V. Gibbens, Dept. 27-4, Chico (Wise County); T. M. Sheffield, Dept. 52, White Settlement; E. Millican Jr., Dept. 56, Euless; J. L. Neill, Dept. 24-6, Everman; G. O. Kilgore, Dept. 81, pro tem and alderman, Sansom Park; J. H. Pyeatt, Dept. 81, Lake Worth.

Aldermen or city councilmen working at Convair include:

R. V. Carroll, 25-3, C. Bunnell, 25-3, and E. W. Moran, 32, all of White Settlement; W. R. Prasifka and J. S. Prigge Jr., both of 6-4 and Lakeside; H. T. Wallis, 27-2, Godley; T. R. Whitley, 24-1, Forest Hill; Aaron Murray, 17, Saginaw, and A. W. Campbell, 25-3, Azle.

A. E. Holcomb, 57, served as Benbrook's mayor pro tem in 1958-59, and as an alderman 1957-60. Holcomb currently is Benbrook's city judge. Other city judges at Convair include J. L. Jameson, 52, Everman, and I. D. Criswell, 28-2, Rhome.



HON. MAYORS—Pictured here are Fort Worth men who serve Convair during working hours and serve their communities as mayors at other times. In center are J. O. Hood and N. T. Childres. Top left is J. L. Neill, top right is G. O. Kilgore. Below, from left: E. Millican Jr., J. H. Pyeatt, J. B. Haden, T. M. Sheffield, G. V. Gibbens.



OLD AND NEW—W. Garcia, left, design group engineer, Dept. 545-7, holds conventional tied harness with metal connectors, while H. C. Baker displays similar harness with wires and plugs molded in soft air-tight, water-proof vinyl. Baker developed process which promises improved reliability.

Harnesses Coated With Air-Tight Plastic To Banish Threat of Moisture, Corrosion

The threat of moisture and corrosion—traditional enemies of electrical equipment—will be banished forever by a new type of harness and connector recently developed at Convair Astronautics.

"Harnesses," as presently used in a variety of complex electrical systems, consist of a maze of wires laboriously bundled and tied together by hand, terminating in connector plugs of various sizes and shapes.

The latest design advance from Astro's applied manufacturing research and process development laboratory (Dept. 290-2) eliminates the "tied" harness by encasing all wires in soft, air-tight plastic, and replaces metal "screw-on" connectors with standard "snap-in" plugs molded directly to harness ends.

Harnesses can also be molded with conventional connectors, molded connectors can be used to terminate conventional harnesses, and in any case, molded plugs will mate neatly with "screw-in" connectors.

The harness molding process is quick and relatively simple.

First, insulated wires for the harness are cut to length and pre-tipped; metal tips to fit into the connector are soldered or crimped to the wire ends. Then the wires are bundled together, wrapped spirally with quarter-inch vinyl strips, and laid in channels in an aluminum mold.

A flat plate covers the mold, and an air gun forces coating material inside.

When the mold is filled, it is heated in an oven at 350° F. for 45 minutes to harden the vinyl. In production, strip heaters on the mold would perform this function.

As it hardens, the coating bonds permanently with the spiral windings around the wires, sealing the entire harness in a sung air-tight envelope.

The molded harness offers complete wiring protection in any environment, as moisture and air are totally excluded.

"Our main goal is increased reliability," explains H. C. Baker, project engineer, who developed the molding technique. "In addition to other advantages, molding adds to overall strength of the harness, as any strain is distributed throughout the entire length instead of bearing only on solder joints."

Major cost savings are anticipated at the production stage. Molding is faster than present hand-tying methods, and identifying numbers can be molded directly on harness and plug, eliminating need for later tagging.

Baker named G. D. Pettie, laboratory analyst, and E. D. Christian, technician, as his principal assistants in developing the process.

T. A. Herbert is supervisor, and T. E. Kerr, assistant supervisor, in charge of the applied manufacturing research laboratory.

Electronic Parts Committee Meets For SD Conference

W. G. Bjornson, SD electronics design specialist, represented Convair at last week's quarterly meeting in San Diego of the Electronic Parts Committee.

A section of Aerospace Industries Association, which Convair President J. V. Naish heads as board of governors chairman, the Electronic Parts Committee is made up of 25 industry representatives from all parts of the U.S.

Formal discussion sessions were held Feb. 7 and 8 in El Cortez Hotel. Convair provided transportation for an all-day tour Thursday to the Fleet Sonar School, Fleet Air Defense Center, and inspection of Convair's 880-990 jet transport facilities.

R. C. Loomis, SD manager, hosted a luncheon for the group in the Convair executive dining room.

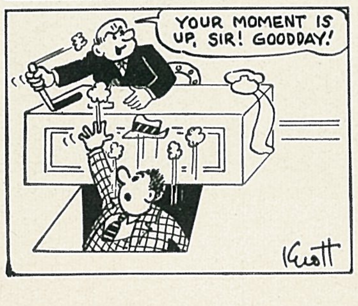
Krafft Ehricke Given Degree

Krafft Ehricke, Astronautics' noted space authority and Centaur program director, was recently recognized with an honorary Doctor of Humane Letters degree by the National College of Education, Evanston, Ill.

Ehricke delivered the 75th commencement address there.

A professor of physics, Ehricke teaches space flight mechanics and space navigation at San Diego State College. He is a consultant to the Office of the Secretary of Defense, operations analysis consultant to Headquarters, U.S. Air Force, and chairman of the National Aeronautics and Space Administration research advisory committee on electric energy systems.





Ping Pong Balls Go Up With Bang In SD Explosive Chamber Testing

Bouncing balls have moved off the ping pong table and into the laboratory to play a new role in explosion proof tests conducted by Convair San Diego systems dynamics test engineers.

The problem involved checkout of electrical systems destined for non-ventilated areas in aircraft or missiles—areas which might become contaminated by explosive gases.

SD engineers use an explosion chamber for the tests, but what was needed was a simple way of being sure that conditions within the chamber were really explosive, without exploding the whole chamber.

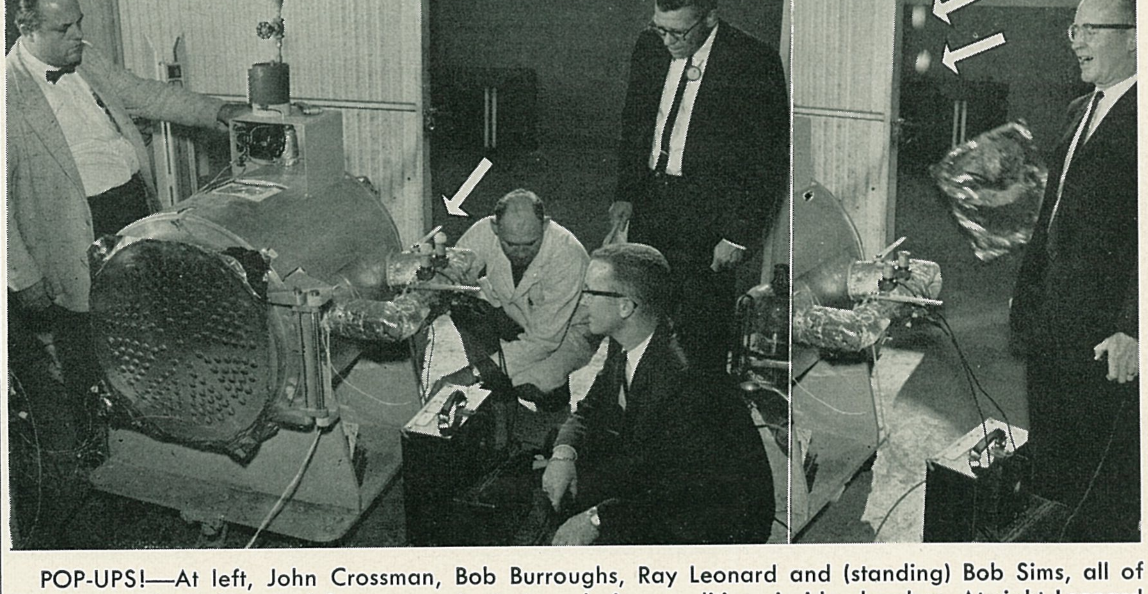
A U-tube "sampler" with ping pong balls balanced on top of a couple of pipes acting as relief valves provided the answer. Gases inside the chamber can be actually sampled in the tube, which is sealed off and sparked by hooked-in electric wires, thus releasing the gases through the pipes. Ping pong balls resting lightly on the pipes act as "indicators." When contents of the tube is sparked and the balls fly upward with a bang, there is no doubt but that the mixture inside the test chamber is explosive, without an actual major explosion and accompanying risks to test articles.

Now, explained Howard Bard, supervisor of systems dynamics components group, systems can be checked out under explosive conditions more easily and safely. Any explosion within the chamber now can be traced immediately to faults in the systems under test. If no explosion occurs, test engineers can be certain that the system is safe to use in the aircraft or missile, regardless of how contaminated the atmosphere may become.

Other modifications saw addition of inside heaters to bring temperature to the required 160 degrees F. and a vaporization chamber for use of JP-4 jet fuel, or gasoline.

One of the first articles to go into the modified chamber was a B-58 radar antenna simulator.

Other items going into the chamber, located in a test cell in Bldg. 79 at Plant 1, have included electrical parts designed for the Atlas missile.



POP-UPS!—At left, John Crossman, Bob Burroughs, Ray Leonard and (standing) Bob Sims, all of SD systems dynamics test lab, prepare to test explosive conditions inside chamber. At right Leonard sets off minor explosion, ping pong balls pop up.

GENERAL DYNAMICS CORPORATION NEWS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of seven divisions and a Canadian subsidiary, Canadair Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

Electric Boat of Groton, Conn., submarines.

General Dynamics/Electronics, Rochester, N. Y., Los Angeles and San Diego, Calif., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.

Material Service Division, Chicago, Ill., building materials, concrete products and coal.

* * *

Appointment of two executives to new General Dynamics positions has been announced. Richard L. Knight, vice president and treasurer, has been named senior vice president-finance. Edward J. Williams, formerly on the staff of the president of Rockwell-Standard Corporation, has been named vice president-manufacturing.

Knight joined General Dynamics in June, 1960, after 25 years with the General Electric Company. Williams had served with Ohio Power Company, the management engineering firm of Norris and Elliott, and American Chain and Cable Company, as well as Rockwell-Standard.

* * *

Electric Boat has been awarded letter contracts for the construction of two additional nuclear-powered submarines under an accelerated Navy program being carried out at the direction of the president. They will be of the same class as the Lafayette, now building at Electric Boat.

In addition to the Lafayette, also currently under construction at Electric Boat are the Thomas Edison and Alexander Hamilton, both Polaris subs, and three nuclear attack submarines. The Ethan Allen is fitting out at Electric Boat prior to commissioning.

NEWS NOTES—Electric Boat has won a $19,314,432 Navy contract to provide the drives and controls for "Big Dash," a 600-foot radio telescope . . . Range of Canadair CL-44 all-cargo airplane has been improved six per cent over original performance guarantees and its speed increased 3.5 per cent . . . Professor Fritz Strassmann, co-discoverer of nuclear fission, will soon acquire a General Atomic-built TRIGA reactor. A TRIGA has been purchased by Johannes Gutenberg University in Mainz, Germany where it will become a major research facility for the University's Institute for Inorganic and Nuclear Chemistry, of which Professor Strassmann is director . . . General Dynamics led the nation's top military prime contractors in total value of contracts awarded during fiscal year 1960. Lockheed and Boeing followed in that order . . . General Dynamics/Electronics' SC 4020 high speed microfilm recorder now has the capability of producing complex engineering drawings by electronic beams in less than one-half second, using information supplied by a computer . . . General Dynamics/Electronics has also announced equipment which through digital tuning can lock on any one of 28,000 frequencies ranging from 2.0 to 30.0 megacycles.

Beauty, Brains Combine at FW

Carol Ann Diffey, 22, of Convair FW, surely must be one of the youngest — and prettiest — nuclear engineers in the country. She lacks only her dissertation for a Ph.D. degree from Massachusetts Institute of Technology.

She won her BS from MIT in 1959, majoring in physics and minoring in math, and graduated in the upper 10 per cent of her class scholastically.

Before joining Convair she worked as a research assistant at MIT while studying post-graduate. She has been assigned to the shielding analysis group in Dept. 6-8.

She likes music, paints a little, and is an expert amateur photographer.

Carol Ann is an honor graduate of Highland Park High in Dallas.



SMART, TOO — Carol Ann Diffey, 22, joins FW as nuclear engineer.

Seminar Set For March 9

M. S. Lachman, management and engineering training supervisor in Convair SD educational services, will be seminar leader for the fifth annual Engineering Management Seminar opening in San Diego March 9.

Sponsored by University of California Extension, the 10-session course features lectures by outstanding experts in the field of management. Luncheon meetings will be held each Thursday in El Cortez Hotel's Franciscan Room, 10:30 a.m. to 1:30 p.m. Registration is limited to 35; fee is $115, including meals.

Information is available from the Extension office, BE-2-7321.

Industrial Nurses Elect SD Officers

Convair people were chosen to fill all elective posts in the San Diego Industrial Nurses Association during 1961.

Dorothy Chesler, Convair SD nurse, will head the group as president following recent installation of officers at Tom Lai's restaurant. Vice president is Dorothy Scrivener, also of SD Dept. 3-5. Mercedes Adolph of Astronautics medical section is new secretary, and O. O. Bowles (Astro Dept. 130-2), treasurer.

Nevitt in Dayton For Club Seminar

C. E. Nevitt of educational services section, is representing Convair FW Management Club at the 90th NMA Management Unity Seminar, being held from Feb. 12-17 in Biltmore Hotel, Dayton, Ohio.

Nevitt is a past FW club officer and now serves on the board of directors.

Island War

Ex-Guerrilla Recalls Life In Philippines

Life as a Philippine guerrilla during World War II years seems a dream to Mario Vaca as he checks manufacturing control order books in Convair SD's tool stores.

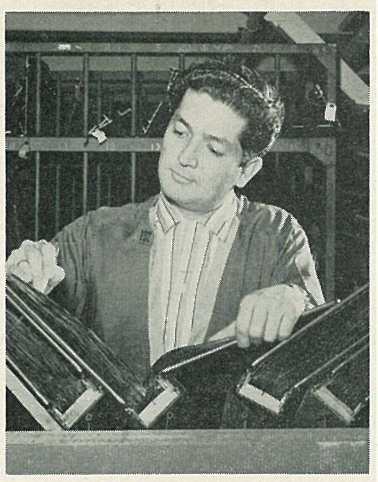
Vaca, who joined SD Dept. 192-1 in June, 1959, recalls exciting episodes of his own youth now only for the benefit of his three sons, Mario Jr., 10; Rudolph, 9; and Henry, 7, when they call for real-life war stories.

Born in Cavite into a Spanish family who originally had come from Granada, Spain, to settle in the Philippines about 1880, Vaca's well-ordered world was swept away with the invasion of the Japanese. His home destroyed, parents and relatives imprisoned, he fled to the hills to join loyal bands desperately trying to harass the invaders.

"I was only 16 then," he recalls. "But most of us were the same age, 15 or 16 — using submachine guns, pistols, rifles, any kind of weapons the Philippine Army could spare us, to hold out until the Americans could get a foothold again."

They "held out" for a couple of years, living in the hills, eating whatever the villagers could slip them, running for cover when a warning came from loyal patriots. Their food was mostly rice, supplemented with fowl or fish cooked in pits under campfires.

When American paratroopers dropped into the Philippines in 1944, Vaca was one of an advance patrol sent into Manila to set up communications. There, he and his platoon were trapped by enemy soldiers. He was interned in Santa Thomas, joining his three brothers, mother and father who had been captured at the start of the invasion. (An uncle and aunt gave their lives at Fort Santiago for assisting guerrillas.)



EX-GUERRILLA — Mario Vaca (SD-Dept. 192) recalls years with Philippine guerrilla war bands during World War II.

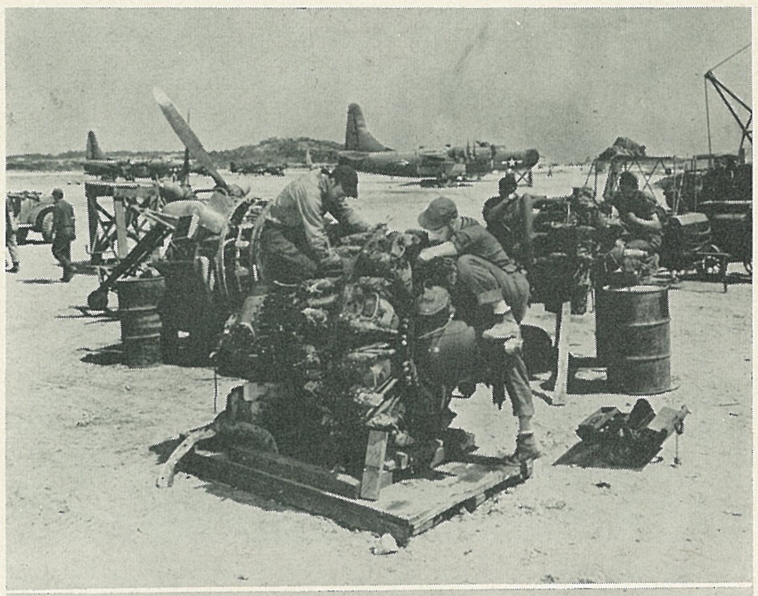
Six months later Vaca and three others escaped over prison walls and rejoined their fighting parties, attached to the 4th Battalion, 21st Infantry, U.S. 11th Airborne Division. He and the rest of the loyal Philippines helped American troops in the recapture of the Islands until the end of hostilities in 1945.

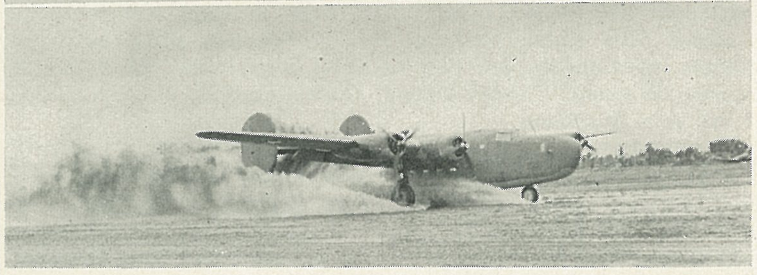
Then followed several years in the United States Navy, marriage to a Mexico City girl, honeymoon at Acapulco, three sons, American citizenship granted for extraordinary service to the country, four Naval medals, two years of college at Mexico City under the GI Bill — and, finally San Diego and Convair.

Field Service Rep. Joins Hawaii 102s

E. O. Miro, Convair SD interceptor field service representative, arrived at Hickam Field, Hawaii, the first of this month to join M. J. Quilter in support of Convair-built planes based there.

F-102As are now stationed in the Islands, assigned to 199th Hawaii Air National Guard Fighter-Interceptor Squadron.





FIGHTING B-24s—In top photo, mechanics work over PB4Y-2 engines on Okinawa while ground troop fighting still is going on. Below, Liberator takes off from muddy landing strip in China.

Tons of Bombs

B-24s in Vanguard During Push To Recapture Philippine Islands

(Following is installment No. 53 in Convairiety's continuing history of General Dynamics' Convair division.)

The Philippines were coming up next. From northwestern New Guinea 57 B-24s took off Sept. 1, 1944, to drop more than 100 tons of bombs on Davao airdromes, the first daytime heavy bomber strike against a Philippine target since early 1942.

With the invasion of Leyte in October, the 5th and 7th groups lent support from a forward base at Morotai, and by mid-November two squadrons of 494th group B-24s were operating from a new Liberator base on Angaur in the Palaus. The 22nd group arrived at Angaur a little later, and on Dec. 22 sent 23 Liberators to strike Clark Field, Manila, with a staging stop at Tacloban. Thereafter, the 22nd and 294th took turns battering airdromes in the Manila area, until enemy air operations were hopelessly disrupted.

While heavies of the 5th and 13th AFs supported the Philippines campaign, pounded Formosa and joined in the successful air-sea effort to cut Japan's southern lifeline, the 7th AF was attacking the Bonins—the 30th group flying from Saipan and the 11th from Guam. Between November and January Liberators flew 1,836 sorties against Iwo Jima, and stepped up this attack prior to D-day (Feb. 19) with round-the-clock bomb and napalm raids. By D-minus-14 B-24s had dumped 4,482 tons of bombs on Iwo, and a naval bombardment expended more than 9,000 tons of shells the final three days. (Neither attack, as it turned out, did much damage to elaborate underground defenses.)

With invasion of the Ryukus in April, 1945, airfields could be built putting heavies within range of Japanese home islands. In July the 11th group moved to Okinawa from the Marianas, and the 494th from the Palaus. Elements of the 22nd, 90th and 380th groups also arrived at Okinawa during July, and the 43rd began operations from Ie Shima. The 373rd Squadron, a B-24 snooper outfit, was transferred from China and attached to the 494th Bombers of the 5th and 7th AFs now began hitting airfields and railroad yards on Kyushu, and in the Shanghai and Hankow areas of China. Only a week before the atom bomb fell, B-24s bombed Nagasaki rail terminals July 31 and Aug. 1. One of the last Liberator missions was a successful fire raid on Kurume, incendiaries dropped by 53 planes burning out 28 per cent of the city.

* * *

In Alaska, the 11th Air Force (Brig. Gen. William O. Butler) entered the war with the 36th squadron, made up of B-17s and one LB-30. Some B-24s were added in time for the mid-June, 1942, strikes at Kiska from Cold Bay. The 404th squadron arrived in July, basing at Nome to conduct Bering Sea patrol. Originally destined for Africa, the 404th's Liberators wore desert camouflage and picked up a local nickname, Pink Elephants.

After we occupied Adak and completed a landing field in September, a dozen B-24s of the 21st and 404th squadrons teamed with fighters Sept. 14 in a new and successful tactic, low-level bombing of Kiska. The attack damaged shipping and started numerous fires, but couldn't be repeated at once. For ten days in a row, U.S. airfields were socked in. (Weather took a heavier toll than the Japanese. Between June 3 and Oct. 31 the 11th AF lost 79 planes of all types, only nine of them in combat!)

* * *

The 10th AF (Maj. Gen. Lewis H. Brereton) was activated at Patterson Field, Ohio, on Feb. 12, 1942 and assigned to the new China-India-Burma theater. Until creation of the 14th AF in China a year later, it operated with meager resources from India, the only U.S. air unit in an area far larger than the U.S., at the end of the longest supply line in existence.

The 10th's first mission was staged with five aircraft April 2. Brereton led a flight of one LB-30 and two B-17s against Japanese shipping in the Andaman Islands. Two B-17s were assigned targets at Rangoon but were unable to complete the mission. Attacks on enemy forces overrunning Burma continued until June when Brereton and his bombers were hastily transferred to the Middle East where the German offensive threatened Cairo.



"Dad left me a priceless heritage of honor, integrity, and easy payments on the car, the farm, the house, two tractors and his watch."



WELCOME GIFT—Convair SD Con-Trib Committee members at Holloman AFB, N.M., hand $500 check to Capt. Luther Taylor (second from right), National Health Agencies drive treasurer. Others, all Convair, are (left to right) John Harris, O. J. Ancel, Martha Williams, Charles Reitzel, Genevieve Kneisel, A. C. Parkhurst, John Martinez.

CRYOGENICS CLASS TO BEGIN FEB. 28; OPENINGS LIMITED

A course in applied cryogenics, featuring lectures by experts in their specialized fields, will start at Convair San Diego Tuesday (Feb. 28).

Designated as a follow-on to two previous introductory courses held last year, the coming program is planned as a study of practical application of cryogenic fundamentals to design and components, said R. H. Nall, supervisor of professional and technical development, SD educational services.

Convair experts in the science of producing extremely low temperatures will conduct a technical review for the first four meetings. Following will be eight presentations by companies engaged in cryogenic research and component manufacture.

Directed by P. L. Brady, SD hydraulics group engineer, first part of the course will be instructed by the following Convair SD men: A. R. Perl and R. V. Morris, both of SD pre-design; S. A. Campbell and R. A. Nau, thermodynamics engineering; and K. C. Hendershot, thermodynamics lab.

Companies sponsoring lectures will be Linde Co., Airesearch-Los Angeles, Pesco Product Division and General Electric Co., Stratos, Airesearch-Phoenix, B. H. Hadley, Inc., and Cryogenic Engineering.

Classes will be held on Tuesdays each week from Feb. 28 through June 20, 4:45 to 6:45 p.m. in the engineering auditorium, second floor, Bldg. 5, Plant 1.

The auditorium's capacity is limited to 150 persons with 105 SD engineers already signed for the course, said L. J. Goldsmith, SD educational services coordinator in charge of enrollment. All registration will be handled on a first-come, first-served basis. To enroll an AVO should be sent to Goldsmith, Room 378, Bldg. 51, mail zone 6-121, as soon as possible.

Rockhounds Slate Wiley Well Outing

Convair SD Rockhounds will trek to Wiley Well this weekend (Feb. 18-19) in search of jasper, agate, pastelite and geode.

Group headquarters will be set up at Middle Camp. Those interested in making the junket are asked to contact CRA Commissioner Danny Whorton, ext. 426, Plant 1.

Speaker at the Feb. 9 club meeting was "Pinky" Kraus, local gem expert, who spoke on "Synthetics."

DEPT. 15 COUPLE WED IN VEGAS

Las Vegas wedding Sunday, Feb. 5, united Patricia Brammer and R. J. Machovec, both SD Dept. 15-6. They were accompanied to the Nevada city by Maureen Brice, also Dept. 15-6, who served as matron of honor. They will make their home in San Diego.

Saturday Schedule For Salvage Yards

Convair employees may shop at SD and Astro salvage yards on the following Saturday schedule: SD — Feb. 18 and March 4; Astro — Feb. 25 and March 11.

Blood Supplies Down to Zero

Cards are now in the hands of Convair SD department heads at Plant 1 for sign-up of donors for this month's SD bloodmobile visit.

All first-shift people are urged to turn out to boost SD's blood supply at the Feb. 23 visit, said Ken Wulfemeyer of employee services. "We need blood," he emphasized. "Convair SD's credit at the San Diego Blood Bank has been wiped out since the last visit in December and enough must be collected next week to see us through the next couple of months."

Average withdrawals by Convair SD people are around 50 pints a month with the demand higher during winter months when there is more illness, he said.

All Plant 1 employees will be solicited with the exception of engineering, electronics, and experimental personnel who donated at the last bloodmobile visit.

Bloodmobile will be located in Bldg. 32, Plant 1, between 10 a.m. and 2 p.m. next Thursday.

Numismatic Prexy To Address Club

Douglas Decker, president of San Diego Numismatic Society, will be guest speaker at a meeting of Convair SD Coin Club next Tuesday (Feb. 21) at 7:30 p.m. in the Hearing Aid Society Bldg., 3843 Herbert St.

Decker, who manages a coin shop in the South Bay area, will discuss "Crystal Ball of 1961."

On display at the meeting will be the trophy which will be awarded at the first quarterly exhibit in March. Also on the evening's agenda will be door prizes, a drawing, coin auction, and refreshments. Copies of the group's amended bylaws will be given to members.

Convair Squad Wins City Championship

A come-from-behind Convair varsity basketball squad won the championship of the city Industrial "A" league last Wednesday night as they scored their sixth straight win.

Trailing Astronautics 23-12 at the half, the SD hoopsters caught fire in the third and fourth quarters, and finished on the winning end of a 48-35 score. SD's Bill Bullock led the point parade with 20.

The Convair five was also leading the National City basketball league last week with four wins, no losses.

Hunter Safety Course Will Start on Feb. 25

Another CRA-sponsored hunter safety course for Convair San Diego and Astronautics sons and daughters will start Saturday (Feb. 25) at the Gillespie Field Clubhouse, El Cajon, at 9 a.m.

Registrations may be made by contacting instructor Arnold Schrock at BR-7-4958 on weekdays after 5 p.m.

Each course runs for three consecutive Saturday mornings. Instruction is given in the handling of the .22 rifle and shotgun. Early registration is urged because each class is limited to a maximum of 14 students.

The course is offered so that young people under 16 years of age can obtain hunting licenses in compliance with California state law. Students must be 10 years of age or over.

If at all possible, students are asked to use their own guns, although a limited number of club rifles are available. Only charge is a 50¢ fee for instruction book, ammunition, and brassard.

Schrock said hunter safety courses will continue consecutively until all Convair SD and Astro young people who are interested receive the training.

200 Expected At Rally III

The event of the year for Astro CRA Sports Car Club will take place Feb. 26 when an expected 200 cars roll off the starting line for Astro Rally III.

The Astro-sponsored event will take rally contestants on a seven-hour, 175-mile drive through the most scenic areas of San Diego County. Points earned in the rally may be credited toward the state championship.

In rally competition drivers strive for precision, covering measured distances within specified times. Fast driving as such is unimportant, and to provide a safety margin, no lap of the course may call for an average speed within five miles of the legal maximum.

Cars will start from Astro's north parking lot at 7 a.m., and finish at Marty's Valley Inn in Oceanside.

Rallymaster is Bill Rector, CRA commissioner, and every member finds himself with an important role to play in making the event a complete success.

$300 SCHOLARSHIP OFFERED IN VALLEY

Daughters and sons of Convair Palmdale or Astronautics MSTS employees have until March 20 to apply for annual scholarships offered again this year by the Convair Antelope Valley Management Association.

Top scholarship of $300 will go to the winning boy or girl. Second and third-place finalists will receive $100 and $50 U. S. Savings Bonds.

Students who will graduate from a high school in the Antelope Valley area in 1961, either January or June, may get applications from principals at their high schools, or from J. T. Bony (Dept. 323-0), phone Windsor 7-5651, ext. 421. Applications are to be turned into school offices before the deadline date next month.

(Convair Palmdale and Holloman AFB off-site facilities are not included in annual Management Club Scholarships sponsored by the Convair SD group.)

Entries Now Open For March Sweeps

Today (Feb. 15) is the first day that Convair SD golfers can make reservations for the next CRA sweeps scheduled March 4-5 at Caliente.

To obtain starting times, contact ext. 1705, Plant 1. Deadline will be Feb. 24.

Results of the sweepstakes at Circle R were not available last week because it was necessary to cancel the Feb. 5 starting times and reschedule them for Feb. 19, according to Ken Wolfemeyer, commissioner.

Officers Returned By SD Choralaires

Convair SD Choralaires last month unanimously returned all its officers to serve through 1961.

They are R. C. Musterait, president; Genieve Shook, secretary (third term); and Mary Arnold, librarian.

W. A. Vogel, director, reports new members have been joining the choral group each week, but more tenor and bass voices are still needed.

Rehearsals, open to all Convair employees and family members, are held at 7:30 p.m. every Monday in the CRA Clubhouse, Pacific Hwy.

Ground School Class Forming

Another free ground school course sponsored by the CRA Solo Flyers will start Wednesday (March 1) at Jim's Air Service, Lindbergh Field.

Open to all Convair SD persons interested in obtaining their private or commercial pilot's licenses, the classes are held between 7:30 and 9:30 p.m.

The present course is more comprehensive in scope than those held in the past and includes instrument flying which is now required by the FAA as part of the final exam.

Registration for the new ground school class can be made by calling Rex Robinson, instructor, ext. 2271, Plant 1.

TOP GLIDER MEET SET FEB. 25-26

Glider enthusiasts from Convair San Diego and Astronautics will help host and compete in the Pacific Coast Mid-Winter Soaring Championships Feb. 25-26 at Torrey Pines Park.

The two-day meet is expected to draw 20 to 30 pilots who will compete in altitude, aerobatics, duration, spot landing, distance and bomb drop contests.

Meet hours start at 10 a.m. on both Saturday and Sunday. Only charge for spectators is a $1 parking fee.

Donations of $4,650 Okayed by Con-Trib

Convair SD employees through their Con-Trib-Club Feb. 1 approved contributions totaling $4,650 to three charitable groups.

Second readings and approval were given the following: Lakota Tarca Oyanke Indian Guides (Antelope Valley), $150 for purchase of minor capital equipment; Otero County United Fund (Alamogordo, N.M.), $1,000; and Family Service Assn., $3,500.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

AEROMODELERS — Annual free-flight scale contest Feb. 18-19. Judging, between 7 and 10 p.m., CRA Clubhouse, Pacific Hwy.

ARCHERY—Nomination of officers at meeting tomorrow (Feb. 16), 7:30 p.m., CRA Clubhouse, Pacific Hwy.

BADMINTON — Annual tourney March 4-5, Federal Bldg., Balboa Park. To enter, call Bill Johnstone, ext. 2995, Plant 1.

BRIDGE CLUB—Next session Feb. 21, 7:30 p.m., Hotel Barcelona, 326 Juniper St.

CHORALAIRES — Rehearsals each Monday evening, 7:30 p.m., CRA Clubhouse, Pacific Hwy.

COIN CLUB — Meeting Tuesday (Feb. 21), 7:30 p.m., Hearing Aid Society Building, 3843 Herbert St.

FISHING CLUB — Meeting Feb. 21, 7:30 p.m., CRA Clubhouse, Gillespie Field.

GLIDER CLUB—Pacific Coast Mid-Winter Soaring Championships Feb. 25-26 at Torrey Pines Park.

GOLF (CRA) — Next Convair SD sweeps March 4-5 at Circle R. Call ext. 1705, Plant 1 for starting times. Deadline Feb. 24.

GOLF CLUB—Sweeps Feb. 25-26 at Coronado. To register, call Alma, ext. 740, Plant 1.

ICE SKATING—Winter Weekend Feb. 17-19 at Big Bear Lake.

JUDO—Workouts and instruction every Thursday in CRA Clubhouse on Pacific Hwy., 6-7:30 p.m.

MOVIES — Reduced-price movies each Friday, Saturday and Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50c; children under 12 free if accompanied by adult.

PISTOL CLUB — Next shoot Feb. 22, San Diego Police Pistol Range, 9:30 a.m.

RADIO CLUB — Meeting tomorrow (Feb. 16), 7:30 p.m., Harbor Drive headquarters.

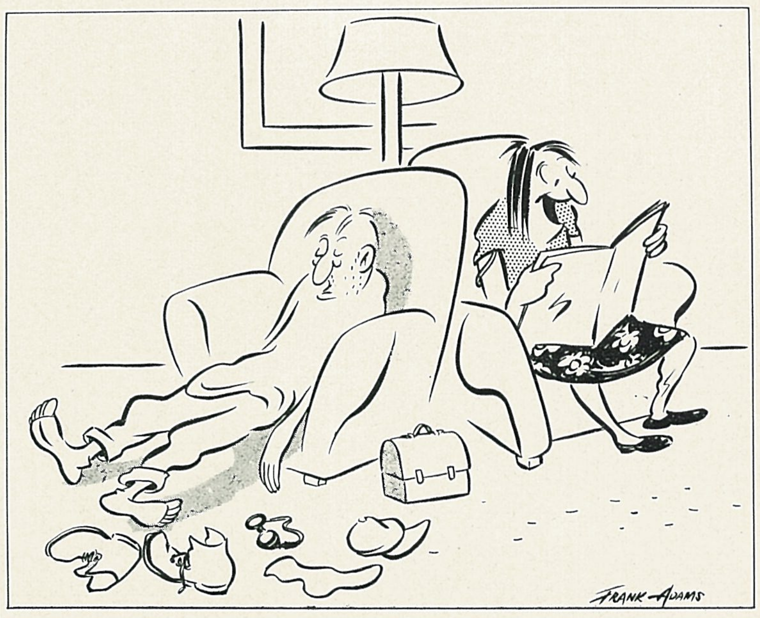
ROAD RUNNERS—Outing to Split Mountain (camp will be made about 10 miles south of Ocotillo Wells) Feb. 17-18-19.

RIDING CLUB—Evening trail ride Sunday (Feb. 26) from Circle R Ranch Stables on Mission Gorge Road at 3 p.m.

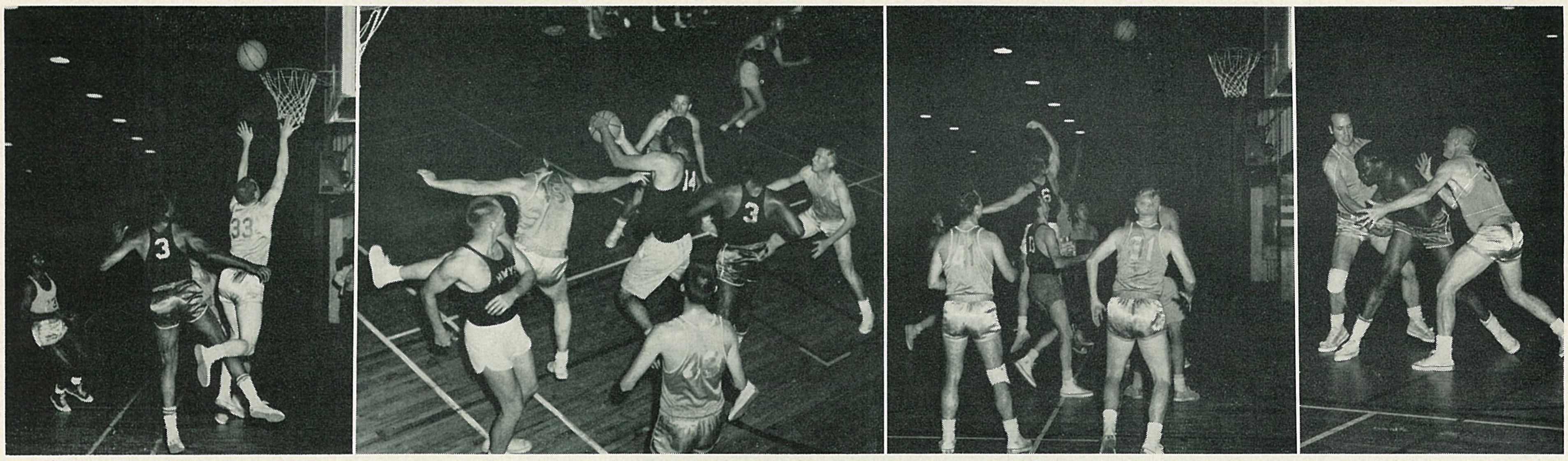
ROCKHOUNDS — Trip this weekend (Feb. 18-19) to Wiley Well. Call Danny Whorton, ext. 426, Plant 1.

SOLO FLYERS — Ground school classes starts March 1, 7:30 p.m. Jim's Air Service, Lindbergh Field. To register, call Rex Robinson, ext. 2271, Plant 1.

SWIMMING — Free family swim night (March 4), between 7 and 9 p.m., Mission Beach Plunge. Tickets available starting Feb. 27 at employee services, Plants 1 and 2, and from departmental representatives.



"Latest styles for men . . . a soft Shetland tweed jacket and luxury gabardine slacks . . . button down Oxford shirt, topped with harmonizing Beau Brummel tie . . ."



LEADERS—Convair SD's varsity basketball team is presently perched in first place in both San Diego and National City hoop leagues. Action shots above (Convair players are in light uniforms) were taken last week as Convair dumped CSEA 53-45 for fifth straight win in San Diego City League. In National City competition the SD hoopsters had a record of four wins, no losses last week. SD squad came from behind in Industrial "A" league to down Astro 48-35 in final game.

Square Dance Huge Success

One of the biggest square dances which will be held this year in San Diego was hosted Feb. 4 by the Convair SD Hoedowners.

More than 450 dancers, representing some 50 or 60 square dancing clubs, and 15 callers showed up for the Convair-conducted Tri-Association Officers Ball.

Representatives were on hand from the association's three districts of Palomar, Heartland and San Diego.

Host Hoedowners were kept busy dancing and serving (first a potluck dinner at 6:30 for guests and callers, then a huge buffet at 11 p.m.). CRA Commissioner Maury Scholz termed the event an outstanding success and said that it will become an annual affair.

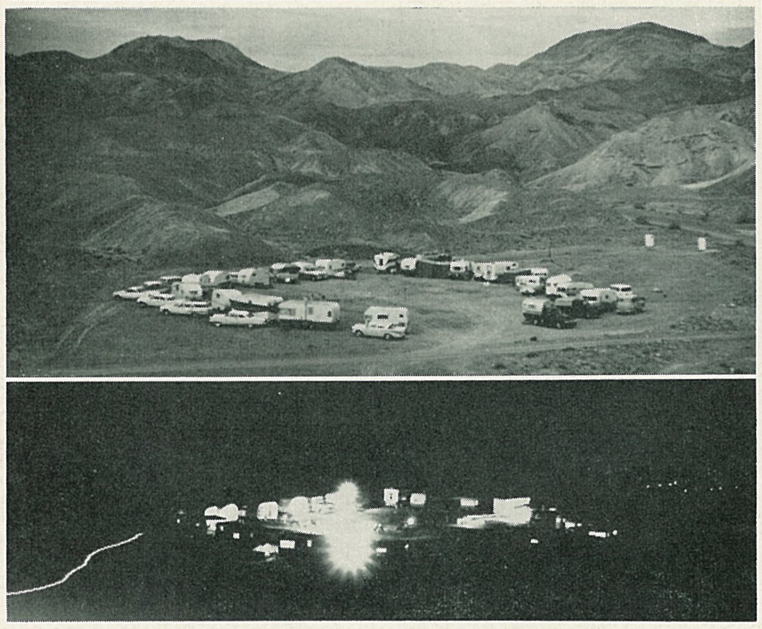
Next big dance scheduled for the Hoedowners will be the all-Convair jamboree to be hosted by Convair Pomona on March 11. In addition to the SD group, dancers from Convair Astro and Palmdale are expected to make the trip.

1,800 FANS WATCH CONVAIR FENCERS

An enthusiastic crowd of more than 1,800 spectators watched a fencing exhibition by members of the Convair CRA Fencing Club when the group performed at halftime at a recent San Diego State basketball game.

Participating in demonstration from Astro were Mike Hurley, CRA commissioner, Dept. 597-1; Lowell Dubberke, Dept. 535-3, and Barbara Proppe, Convair daughter. Techniques in woman's foil, and men's foil and epee were displayed.

In late March, the club will sponsor an open tournament in which fencers from throughout San Diego County are expected to participate.



RUNNERS RENDEZVOUS—Convair SD Road Runners proved to be photogenic group at outing last month at Painted Gorge in Anza Desert. Typical camp procedure shows rigs ringed in circle, thus leaving enclosed area in center for social activities. Wavy line at left in night photo was made by man walking along swinging lantern.

CRA Sports & Recreation Convairiety

March, April Dates Firmed For Annual Keg Tournament

Twentieth annual Convair SD championship bowling tournament will be held March 25-26, April 1-2 and 8-9 at Pacific Recreation.

CRA co-commissioners of bowling, Jim Hayman and Mike Brooks, have set a deadline of midnight on March 12 for placing entries for the event, traditionally the year's highlight of keg activity.

Entry blanks will be available this week at employee services, Plants 1 and 2, and from league secretaries.

Hayman urged all keglers to fill out the forms as soon as possible and, at the same time, enclose money deposits so that all participants will be assured of reservations.

Last year, more than 550 Convair bowlers entered the tourney, collecting more than 100 prizes. Prize ratio this year will be one for every five bowlers.

As in the past, tourney events will include team competition, singles and doubles, and an all-events bracket.

Hayman asked keglers to keep the following requirements in mind when filling out forms:

Five sanctioned players may form a team and enter without payment of additional membership dues.

Bowlers can play on more than one team, but should indicate this fact on each entry form that they fill out. Hayman said this holds only for keglers who are team members during regular league play.

Only one entry per person will be allowed in doubles and singles; doubles only and singles only will not be accepted; women's team will compete in a mixed division rather than separately.

10 Button Awards At Next Meeting Of Fishing Club

Presentation of button awards to ten 1960 winners will highlight the Feb. 21 meeting of Convair SD Fishing Club which will start at 7.30 p.m. at the CRA Clubhouse, Gillespie Field.

According to CRA Commissioner R. W. Menzie, the award winners are Hugh John Morehouse (Dept. 7), Larry Thrall (husband of Evelyn Thrall, Dept. 3-2), both marlin catches; H. G. Elrich (Dept. 102), Leon B. Kercher (Dept. 95), Lloyd Paul Smith (Dept. 267), yellowtail; W. C. Bowen (Dept. 188), W. J. Rhine (Dept. 6-35), George J. Kureri (Dept. 401-4), bonita; Joe Sapko (retired, Dept. 25-6), catfish; and Thomas Arsulich (Dept. 15-4), surf perch.

Winner of the $10 first prize in the January Fishing Contest was Ruth Menzie (wife of the commissioner) who entered a 13-inch trout.

Bridge Club Night Scheduled Feb. 21

Next Convair San Diego Bridge Club card night is slated Tuesday (Feb. 21) starting at 7:30 p.m. in the Barcelona Hotel, 326 Juniper St.

An evening of exciting bridge that is sure to sharpen their game is promised players. All interested Convair employees and family members are invited.

A fee of only 25¢ per person is charged on regular play nights. On master point nights (the next one is scheduled March 21), the charge is $1.

Players who need partners or desire more information should contact Frank Westphal, ext. 2225, Plant 1.

Free Swim Night Scheduled March 4

First free swim night of the year for Convair SD families will be held Saturday (March 4) between 7 and 9 p.m. at the Mission Beach Plunge in Belmont Park.

Tickets will be available starting Feb. 27 at employee services, Plants 1 and 2, and from CRA department representatives.

Free swim sessions for Convair SD families will be scheduled monthly on the first Saturday, except in July when it will be held the second Saturday (July 8).



STRONG SQUAD—Team photo of SD varsity hoop squad includes coach Bob Miller (in center); directly behind Miller is Bill Bullock, then clockwise are Mel Stilson, Dee Trepanier, Gordon Place, Dick Fenton, Curt James, Charley Wright and Dick Huntington.

Busy Riding Club Schedules Trail Event, Meet, Horse Show

An evening trail ride for members and guests of Convair SD Riding Club will be held Sunday (Feb. 26).

The trek will start from the Circle R Ranch Riding Stables on Mission Gorge Road at 3 p.m. Rental horses will be available.

Reservations can be placed by calling Elizabeth Holman, ext. 2862, Plant 1, first shift; or Roy Sims, evenings, at JU-2-8096.

At the next club meeting on March 2 members will view a color-and-sound film sponsored by the International Arabian Horse Association.

Also scheduled for early next month is an Open Horse Show and Gymkhana on March 5 at the Clover Leaf Stables, Mission Valley.

Members and prospective members are reminded that effective March 1 special club discounts (riding instruction, etc.) will not be honored without validated 1961 membership cards.

All riders are asked to fill out the new membership form so the club can better decide which type of activities to schedule during the coming months.

Membership cards and applications can be obtained by contacting V. V. "Tommy" Thomason, ext. 1047, Plant 1; employee services, ext. 1245, Plant 1; or Marc Beresford, ext. 1660, Plant 1.

Convair Ends Play With 11-3 Victory

Convair SD's National League baseball entry ended the season last month on a triumphant note, routing last year's league champs, the Cardinals, 11-3.

The Convair win knocked the Cardinals out of a tie for first place in the city league, and gave the SD nine second place in the second round of play.

Eddie Moraga threw four-hit ball at the Cardinals as his teammates collected 11 runs, including a Dick Fenton homer in the eighth with one man on base.

Managed by CRA's Pete Beyrer, the Convair team ended the season with a league record of six wins and four losses.

Runners Set Trip To Split Mountain

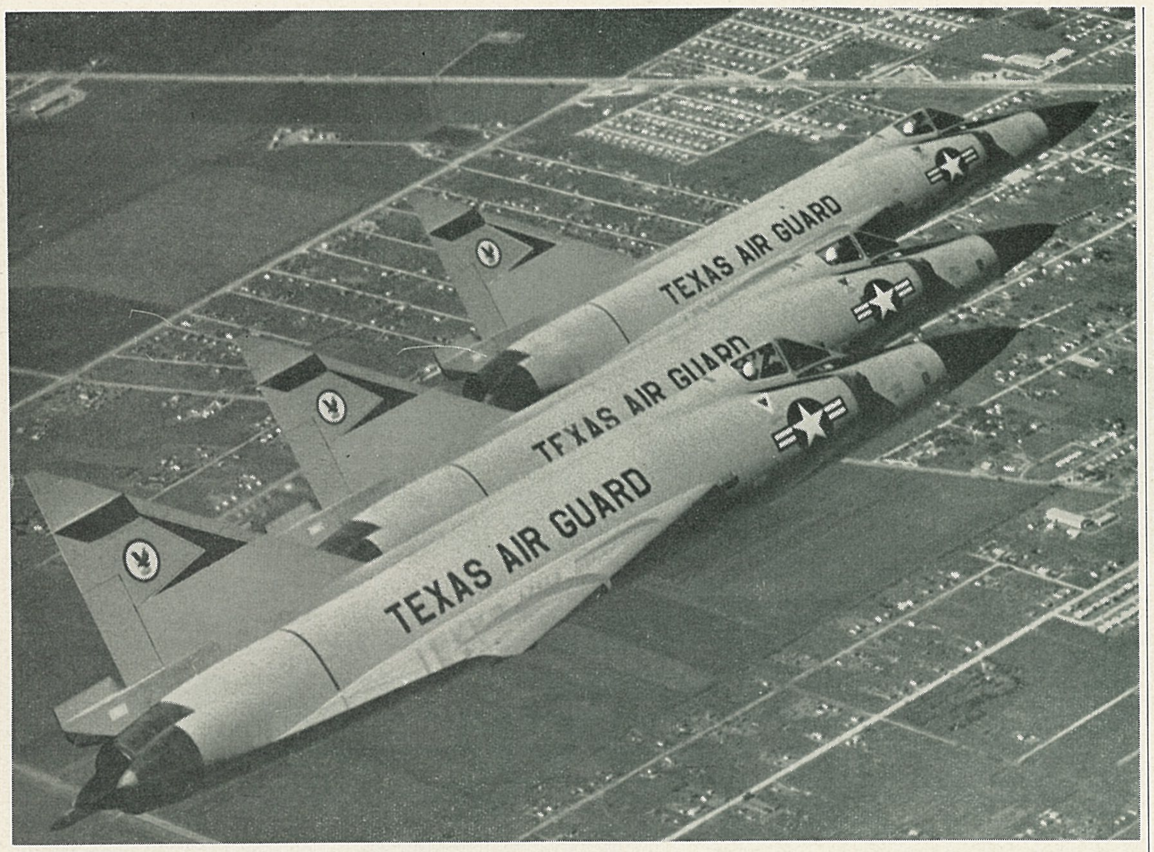
Convair SD Road Runners will head for Split Mountain on their next outing scheduled this weekend (Feb. 17-19).

Camp will be made in the Fish Creek Wash area, some 10 miles south of Ocotillo Wells, according to publicity chairman, Lowell Ward.

Fish Club to Host Wildlife Federation

Convair SD Fishing Club will host the Feb. 28 meeting of the San Diego County Wildlife Federation at the CRA Clubhouse, Gillespie Field.

All interested Convair persons are invited to attend the affair which will start at 7:30 p.m. Meetings usually include committee reports on fish and game legislation, problems concerning access to public lands, and other discussions.



WELL GUARDED—Zooming upward in precise formation as they patrol Texas skies is trio of Convair F-102s attached to 182nd Air National Guard Fighter-Interceptor Squadron at Kelly AFB, near San Antonio.—ANG Photo.

SD Researchers Strive For Surface Finishes Impervious to Sun, Mist

Materials and finishes for Convair's planes and missiles are being battered by constant mist from the Pacific Ocean's breaking surf, day and night, month after month, as exposure tests go into their second year on the pier of Scripps Institution of Oceanography.

Convair San Diego materials and processes laboratories have the privilege of keeping two large racks on the La Jolla shore pier. Samples of different types of materials, paints, finishes, sealants can be kept there indefinitely in what is termed the "worst" possible climatic condition—combined sun and moisture.

"If materials and finishes can hold up under the constant dousing they get from the moisture blowing over them all the time and the sun beating down, they will be immune to practically any weather condition," said J. C. George, in charge of the SD lab's process chemistry section.

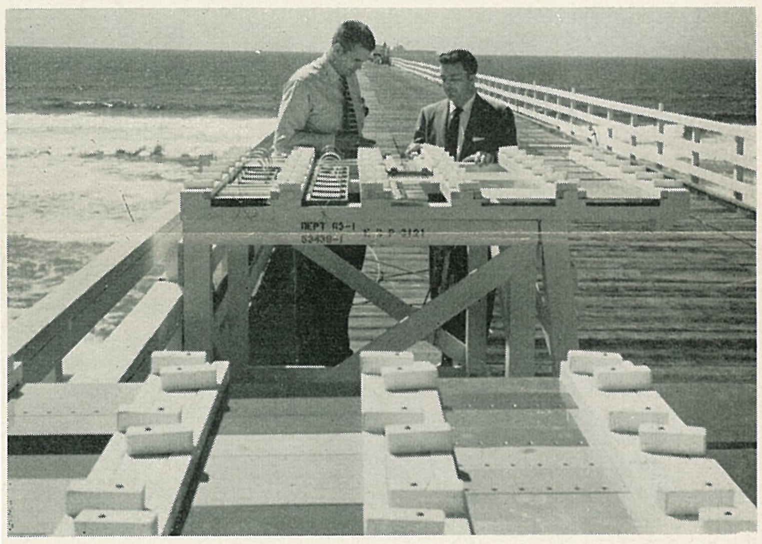
Scripps allows Convair SD to position two racks on its restricted area, out of the way of traffic, in exchange for unclassified information gathered during tests. Astronautics borrows space on SD racks now, but plans to set up facilities of its own there some time in the future. Both Westinghouse Electric Co. and Lockheed Aircraft have samples sunning, and San Diego Gas and Electric Co. is exposing such items as cables, meters, and insulators on the pier.

The Convair racks, built especially for the tests, have 5x5½-ft. surface area. Tops of the racks swing down like tables to insert samples. Each will hold over 100 samples ranging in size from 3 inches wide and a foot long to 10 or 12-in. squares. Samples are clamped under wooden strips, then propped at a 45-degree angle facing south.

Materials being tested include aluminum, stainless steel, magnesium, and combinations fastened together with metallic fasteners or adhesives. Different paints and finishes using various types of pigmentation are exposed to see what kind will hold its color the best under actual outside weather buffeting. Each sample is dated, and tape covers sections of original finishes for later comparison. Marine paint on the racks themselves is under observation as part of the testing.

A. F. Hooper, responsible for SD environmental testing, says that the samples are visually checked at regular periods, usually the first month, third, sixth, and then after a year. "It takes at least a full year to project how well a material will stand up in extended service," he said.

Two other identical racks now exposing samples on top of Bldg. 51 at SD Plant 1 will be moved to the Scripps pier "rough weather" point when needed.



WET SPOT—Al Hooper and Jim George of Convair SD materials and processes lab place samples on Convair racks located on Scripps Institution of Oceanography pier, La Jolla, just over breaker line, for long exposure to damp weather.

Score From Convair FW To Support Bunker B-58s

George Kelbert, product support senior engineer, has been named engineer in charge of Convair operations at Bunker Hill AFB, Peru, Ind., home of the second B-58 wing.

In making the announcement, chief of product support Ralph Reade said Kelbert and about 20 other Convair people will "eventually" support Convair's effort at Bunker Hill.

Meanwhile, SAC has announced that the 305th Bomb Wing at Bunker Hill will receive its first B-58 Hustler in May as part of the Air Force's plan to replace part of the B-47 bomber force.

The SAC release continued:

"Crews from the 305th will train at Carswell. According to Capt. Walter McAlister, training project officer from the 305th, seven maintenance officers and six operations personnel have already arrived. About 390 men from the 305th will be trained here from Feb. 6 until June 20.

"The 305th will be fully equipped with 40 of the supersonic jet bombers by May, 1962.

"When the transition from B-47 to B-58 bombers is completed in 1962, approximately 300 SAC men will be assigned to the 305th."

"Convair will send about eight technical representatives and maybe a dozen people from reliability group to Bunker," Reade said.

"We'll probably send the first few Convair people up in April, then send the others gradually as they are needed."

Reade said Convair personnel were already busy — both here and at Bunker AFB — on the calibration and operation of Hustler tactical ground support equipment.

In addition to the Convair people, about 32 vendor technical representatives are tentatively slated to support the operation.

The Hustler will be joining a "relative" upon arrival at Bunker Hill. Air Defense Command's 319th Fighter-Interceptor Squadron with its F-106s is a tenant unit of the base.

Kelbert, who holds an aeronautical engineering degree from Georgia Tech, has supported Convair's test effort for the past several months at Edwards AFB.

He joined Convair in 1949 as an engineering draftsman and served as field engineer, customer service senior engineer, and product support senior engineer.

VALUE ENGINEERS ORGANIZE AT FW

Fort Worth-Dallas Society of American Value Engineers has been formed to "promote further efforts in value control."

Bill McMurry, Convair FW training coordinator for value engineering, has been elected temporary chairman of the group, comprised of 25 members.

A permanent organization will be chartered within three months.

"Our purpose is to exchange value engineering information and to offer service and knowledge to smaller companies in the area who may not be able to conduct full-fledged value control programs," he added.

Personnel from Convair, Bell Helicopter, Chance-Vought, and Dresser Industries, Inc. (Dallas and Houston) attended the organization meet. Also present was Cdr. W. C. Rivers, of the Inspector Naval Materials Office.

PANEL DISCUSSION SET ON SUPERSONIC TRANSPORTS FEB. 21

C. L. Blake, manager of Convair transport systems development, will moderate panel discussion on supersonic transports at the Feb. 21 joint meeting of San Diego sections of Automotive Engineers and Institute of Aerospace Sciences.

"Supersonic Transport Requirements," will be discussed by a panel composed of W. H. Schaefer, Convair SD design specialist; Hugh M. Rush, manager of engineering laboratories at Rohr Aircraft Corp.; Leland S. Reel, principal engineer at Ryan Electronics; J. I. Hope, manager of supersonic transport engines for General Electric Co.; W. C. Benson, manager of support equipment at Solar Aircraft Co.

All Convair people concerned with future requirements of supersonic transports may attend the dinner meeting in the Crystal Room of the U.S. Grant Hotel. Social hour will be at 6:15 p.m., dinner at 7:15, and panel discussion at 8:15. Tickets will be sold at the door for $3.50.

Information is available from P. B. Stephens, ext. 2779, SD Plant 1.

Convair FW Engineer Will Present Paper

A technical paper by R. R. Coffman, Convair FW aerophysics engineer, will be presented before the Southwestern Institute of Radio Engineers Conference and Electronics Show in Dallas April 19-21.

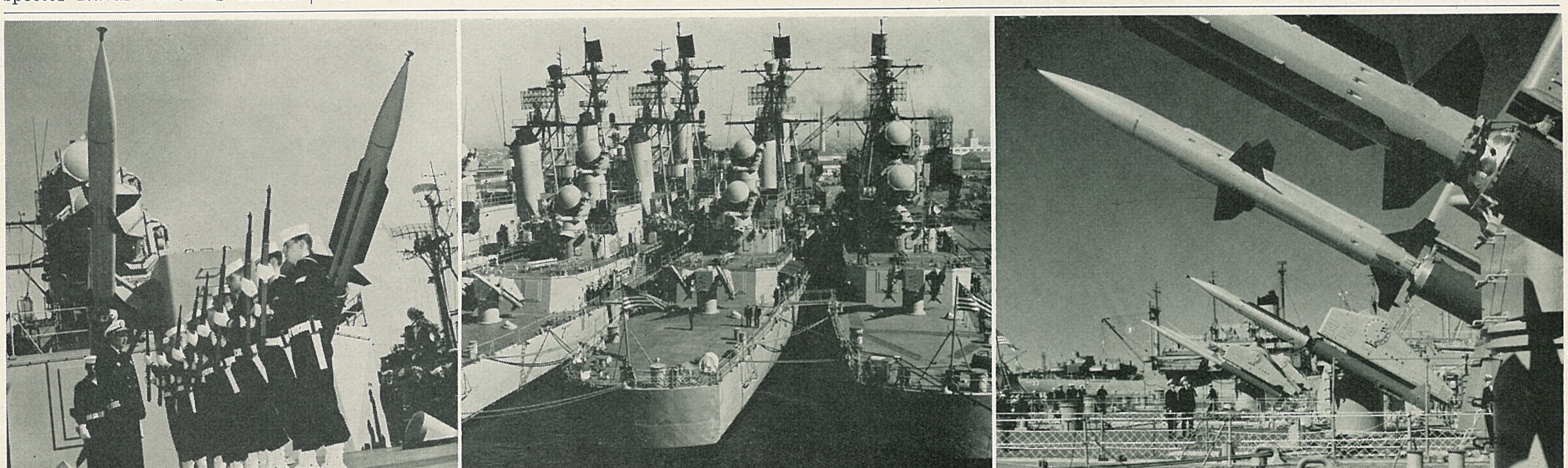
The paper is entitled "A Study of Airborne Radar-Beacon Traffic." More than 4,000 engineers and other scientific personnel are expected to attend in Dallas Memorial Auditorium.

Joe Mernik Awakens, Finds Self All Alone in Moving Airplane!

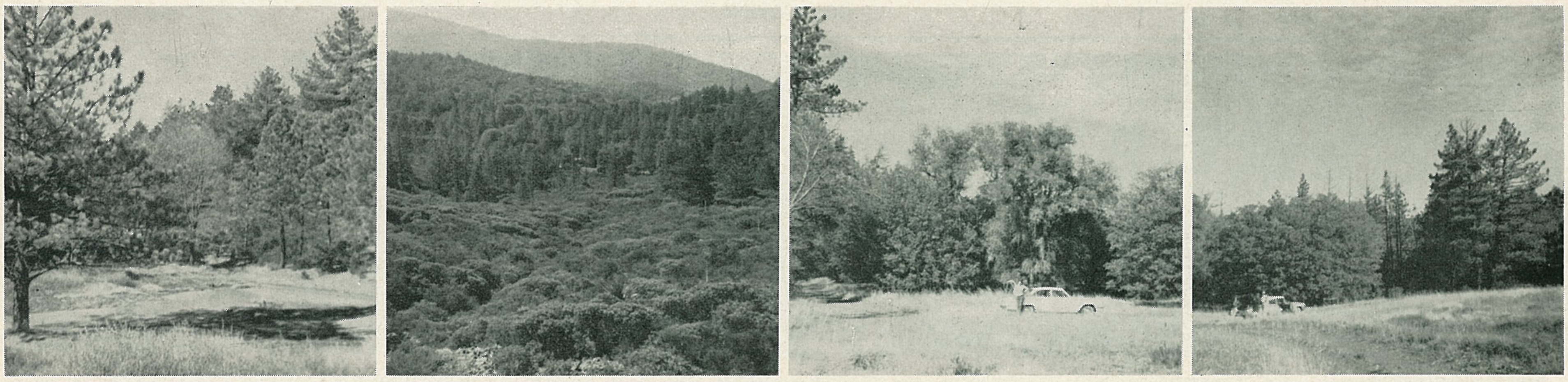
An Astronautics survey team of 22 was returning to San Diego from Schilling AFB, Kan., by Model 240 and stopped to refuel at Winslow, Ariz. Ready to resume, the pilot discovered the airport had no portable power unit to start the engines and the stationary supply was some distance away.

Turning to with a will—more or less—the passengers (all but one) pushed and shoved the plane into position. Inside asleep was Joe Mernik, Astro chief of guards, who awakened to find himself all alone and the plane moving.

Just what his sensations were is not recorded, but outside the passengers could hear Mernik beating on the door, "Lemme out!"



MISSILE MIGHT—Press photographers had field day Feb. 4 when four of Navy's new guided missile frigates tied up alongside each other in San Diego Bay. They were the USS King, USS Coontz, USS Preble, and USS Mahan, each is armed with Advanced Terrier missiles built at Convair Pomona. Missiles shown in ship's launchers are known as "pretty birds," descriptive of their use only as "models," and not for actual firing.



SCENIC SPLENDOR—"Pine Crest" is name proposed for Convair San Diego Recreation Association's new camping and recreation spot some three miles from Julian on Route 79. Manzanita in second photo will be cleared and area graded for short ski slope and toboggan slide. Meadow in third and fourth photos will be central recreation area for Convair people. CRA presently owns total of 51½ acres directly across highway from Desert View or Inspiration Point.

C-V CONVAIR

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Convair Division of General Dynamics Corporation.

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EDITION

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Vol. 14, No. 5 — Wednesday, March 1, 1961

SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. — ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.

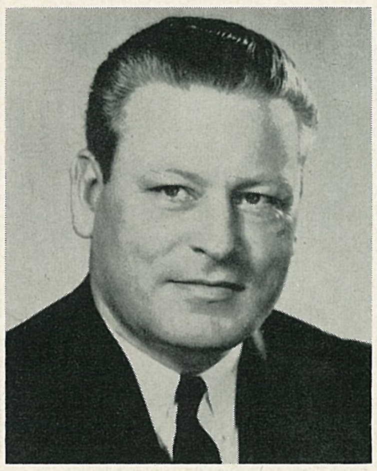
Hypervelocity Flight Study Series Slated

Problems of hypervelocity flight in the extreme upper atmosphere will be discussed in a lecture series starting this month in San Diego as a University of California Extension course.

Dr. David B. Medved of Convair SD physics section, San Diego coordinator and member of the advisory committee preparing the series, said that 15 specialists will be brought here in the first course of this type ever offered. He emphasized that material presented will be of particular interest to Convair SD and Astro people working in the areas of missiles, satellites, or outer space vehicles.

Topics to be covered are kinetic theory of gases, properties of the upper atmosphere, satellite dynamics, surface particle interaction, aerodynamics of hypervelocity objects. Physics and struc-

(Continued on Page 3)



AT THE HELM — C. Rhoades MacBride, executive vice president of General Dynamics Corporation, has taken over responsibility for operations of Dynamics' Convair division as acting president following the resignation early this week of J. V. Naish, president since 1958. MacBride's association with Convair dates from 1951 when he represented a management consulting firm engaged in analyzing operations of Consolidated Vultee. Associated with aircraft for 20 years, MacBride became a senior v.p. of Dynamics in 1958 and executive vice president-operations in 1960.

Record Crowd Sees Hawkins Receive '60 President Award

A new attendance record was established by Convair San Diego Management Club at the Feb. 15 meeting when more than 700 members packed the El Cortez Hotel Caribbean Room.

Sharing the spotlight were Jerry G. Hawkins of Dept. 6, who received the 1960 President's Award, and principal speaker W. Cleon Skousen who discussed "Can The West Win?"

Hawkins was presented a plaque and $250 gift certificate for golfing equipment. The winner started his Convair career in 1940 doing detailing work in the engineering department at Convair Fort Worth and then filling some seven different positions before reaching his present post as senior mechanical group engineer at Convair San Diego.



J. G. Hawkins

To win the operating division's top cost reduction honor Hawkins submitted a Cost Improvement Proposal which saved the company $100,478 based on one-year scheduled production.

His CIP recommended that the nose and main landing gear assemblies for the jet transports be procured and received as separate items and assembled in the division, instead of being procured as complete packages.

Previously, R. C. Loomis, Convair vice president and SD operating division manager, had handed out certificates of commendation to the 15 candidates who had been declared eligible for the President's Award. Each had chalked up company savings of more than $25,000.

Other award winners at the meeting were Keith Sears of Dept. 3-2 who received the Management Club's Mug of the Month and Paul F. Veal (Dept. 3-8) who received the MacSave-it trophy for January.

Five Customers To Get 880-Ms

Five customers will be taking delivery this summer of Convair 880-Ms, modified version of the basic jet transport.

Seven of the 880-Ms are in major structure bucks or wing mate this week. The seven planes, which will move down the line in sequence, are for Avensa Airlines of Venezuela, Alaska Airlines, Japan Air Lines, and Federal Aviation Agency (to be used in its own jet transport training program).

First of this group of 880-Ms will be in major mate in late March. Deliveries are scheduled in May, June and July.

Two other production 880-Ms are in major mate in Bldg. 3 now and are scheduled to enter the flight test program in April and May. The second of these is slated for delivery to Asiatic Aeronautical Company Limited.

Johnson Urges Eye on Costs

Competition continues to increase in intensity as more industrial giants invade the field of defense, Earl D. Johnson, president of General Dynamics Corporation, told 700 members of Convair Astronautics Management Club in San Diego last week.

To meet the challenge, divisions of General Dynamics have a considerable advantage, however, with unparalleled technical competence, though he warned this alone is not enough. To win, General Dynamics also must be competitive in costs.

"We must practice competitive thinking without cheapening our products," he cautioned.

Referring to General Dynamics as "the catalyst for air, space, electronic and submarine ages," he said, "we must push forward into unknown realms."

Commenting upon creation of General Dynamics/Electronics, Johnson indicated that there was no intent of depriving other divisions of electronic capability necessary to product development, but pointed out the necessity of concentrating major facilities under one managerial head in competition for electronic business.

"Fifty per cent of the aircraft dollar is in electronics," he added.

Johnson was afforded a standing ovation when introduced by E. D. Bryant, Astronautics manager of operations. The meeting was attended by members of the board of management and board of directors. Among the latter, Johnson introduced Otto Marx, 91, as the "grand old statesman" of General Dynamics and recalled it was Marx' support in the grim days of 30s that kept Electric Boat in business, the company that afterward became General Dynamics.



THE FUTURE — Technical superiority is not enough by itself, Earl D. Johnson told Astronautics management last week. Costs must be competitive in a time of increasing competition.

Famme Assumes Operations Post; New Factory Mgr.

A new batting order developed late last month for the manufacturing team at Convair San Diego, and there were a number of new positions, including four assistant factory managers and restoration of the general foreman level.

R. C. Loomis, SD manager and Convair vice president, made the appointments.

All the names involved are well known and respected for years of factory leadership dating back, in many cases, as far as PBY days.

Joe Famme, with Convair 25 years and a veteran engineering executive and former F-106 production man, succeeds Conrad Kunze as assistant division manager-operations. Kunze, who joined Convair in 1956 at Fort Worth and transferred to San Diego in 1959, has left the company.

Succeeding veteran SD factory manager Paul Osborn is F. H. "Red" McLaughlin, for many years a key member of Convair SD's hard core of factory management. Osborn, who underwent surgery several months ago, has resigned and said he will rest awhile before considering any future activity. With Convair SD since 1940, as factory manager he headed jet transport production during the critical months since 1958. Before that, he filled a similar post at Plant 2 for four years during F-102 and F-106 production.



F. H. McLaughlin

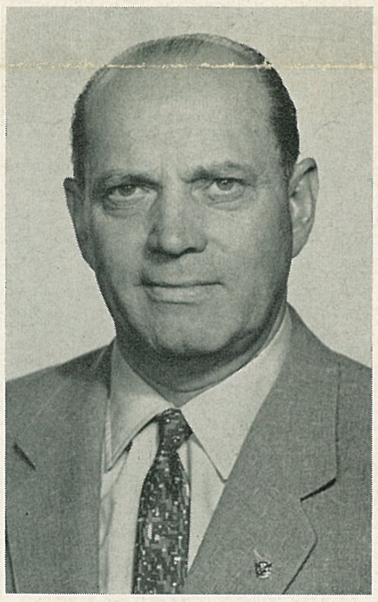
Famme was one-time project engineer on the B-24 Liberator bomber, XB-46 jet bomber, and XP5Y and R3Y turboprop flying boats. He was named SD chief project engineer in 1951 in charge of the Convair-Liner series and assistant chief engineer in 1954. In 1958 he became works manager of Plant 2, directing F-102 and F-106 production. Most recently he has been director of manufacturing development for Convair.

McLaughlin joined Consolidated in 1934 and moved up the ladder in B-24 days, saw service on the L-13 project as well as with T-29s as general foreman and superintendent. In 1958 he was made factory manager at Plant 2.

Night manager will be Fred Grossher whose service with Convair dates back to 1935. He directed R3Y major assembly as superintendent, moving to superintendent of Plant 1 fabrication in 1954. Since the inception of the jet transport program he has headed jet transport wing activities as superintendent.

Both McLaughlin and Grossher report directly to Famme.

(Continued on Page 2)



Joe Famme



Harry Rote



Fred Grossher



A. B. McFarland



Ed Robinson



Bill Reed



Steve Barinka







SERVICE AWARDS—Two 30-year men and nine 25-year veterans are awarded at Convair San Diego: (at left) Conrad Kunze clasps hands of E. H. Roeckel (Dept. 31) and L. V. Denny (Dept. 149), after presentation of 30-year service emblems. Others, all with 25 years service, are (left to right) W. H. Evans (Dept. 190-5), R. T. Le Vine (Dept. 6-41), A. A. Fabbri (Dept. 6-03), and R. R. Hoover (Dept. 6-21). In center shot, J. H. Famme, SD assistant manager, pins 25-year emblem on M. J. Wells Jr. (Dept. 6), with other 25-year men looking on, L. E. Ray (Dept. 401) and S. C. Greenleaf (Dept. 400). In shot at right, R. C. Loomis, SD manager (far right), points out 25-year service pin on W. M. Basile (Dept. 160), to George Schicht (Dept. 101), also 25-year man.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period Feb. 16 through Feb. 28.

Twenty-five-year: Dept. 6-53, M. J. Wells Jr.; Dept. 101, George Schicht; Dept. 160, W. M. Basile; Dept. 249, J. A. Gliebe; Dept. 400, S. C. Greenleaf; Dept. 401-4, L. E. Ray.

Twenty-year: Dept. 6, Alexander Avgerenos, Ludvig Knudsen, F. J. Schnaubelt, R. J. Wolfe; Dept. 31, M. V. Kaiser, R. C. Trout; Dept. 68-3, F. N. Williams; Dept. 91-3, J. L. Smith; Dept. 100, Duke Ramsey; Dept. 160, C. F. Douse; Dept. 192, F. L. Biscak; Dept. 205, H. B. Millman; Dept. 216, R. V. Brunner.

Fifteen-year: Dept. 6-05, W. J. Roha; Dept. 7-40, P. E. Desbiens; Dept. 15-5, L. R. Holz; Dept. 101, Lillian V. Anderson; Dept. 171-0, J. B. Robertson; Dept. 400-4, Viola F. Bruner.

Ten-year: Dept. 1-71, Joyce M. Simon; Dept. 1-98, R. L. Russell; Dept. 3, T. F. Weinberg, Martha S. Woodberry; Dept. 4, V. M. Barreras; Dept. 6, W. J. Ellison, C. D. Q. Layman, W. B. Love, R. S. Oberst, D. F. Ognibene, A. L. Penulas, J. D. Posik.

Dept. 7, J. A. Lowe, L. J. Moran, E. W. Revell; Dept. 11, Richard Parsons; Dept. 14, H. L. Berglund, W. A. Morgan, P. S. Tibbetts; Dept. 15, W. H. Lindsay, Louise A. Paine; Dept. 21, R. G. McCusker; Dept. 31, H. N. Alexander, L. E. Ditler, Aileene M. Judd; Dept. 44, Barbara Q. Thorndyke; Dept. 69-1, P. N. Bosch; Dept. 91-7, F. L. Hinton, Ann D. Moore; Dept. 101, Avelina R. Avenetti, John F. Mayer, Monta S. Orrell; Dept. 102, C. H. Gray; Dept. 116, Gloria V. Calderon, Henrietta S. Rinder, Marion B. Shumard; Dept. 119, Anna M. Carl.

Dept. 123, J. H. Valdez; Dept. 129, Molly N. Jones, Eva S. Morland, Evelyn P. Roberts, Anna W. Sutton; Dept. 133, Edith Porter; Dept. 135, Gloria M. Hurst, Michael Popovich, Anacleto Rodriguez, E. R. Wollas; Dept. 136, Giovanni Croce, Alice W. Leonhard; Dept. 139, Rose G. Ponchetti; Dept. 140, Pearl C. Douglas, Paul McKinsey; Dept. 143, R. H. Maraman; Dept. 146, Otto Bonnet; Dept. 171, D. E. Lehman.

Dept. 180, V. V. Fletcher, Bryan Sams, G. R. Wegener, B. J. McWhorter; Dept. 188, Catherine J. Jones; Dept. 192, Doris E. Gilbert, Katherine G. Hart; Dept. 197, Melsie J. Gerhardt, Naomi G. Smith; Dept. 201, Sabino Mazzilli, Gloria Y. Randall; Dept. 218, Lehoma B. Glover, Nina C. Marka, Mary F. Mason, Isabel Mendoza, Mary H. Sterrett, Dorothy T. Stroup, Mary W. Trogdon.

Dept. 223, C. T. Neal Jr., C. R. Tate; Dept. 249, Alene Waller; Dept. 292, C. S. Bates; Dept. 400, J. J. Grimes, C. A. Roswell; Dept. 401, O. C. Baillif, Ike Gordon, S. V. Halcon, G. S. Heun, O. W. Lysher, Rachel S. Medcalf, Tsutomu Nakano, F. W. Thaanum, Gail J. Urdahl.

PALMDALE

Ten-year: Dept. 321-1, H. S. Sullivan.

Retirements

SAN DIEGO

BURGESS—Ernest T., Dept. 230. Seniority date Dec. 17, 1946, retirement effective Dec. 9, 1960.

COOK—Howard M., Dept. 401-1. Seniority date Dec. 29, 1950, retirement effective Nov. 12, 1960.

DUNN—Margaret C., Dept. 205. Seniority date Feb. 8, 1952, retirement effective Feb. 13, 1961.

GEORGE—Phil B., Dept. 401-0. Seniority date Oct. 12, 1955, retirement effective Jan. 16, 1961.

KAMPPLAIN—Luther G., Dept. 188-2. Seniority date March 4, 1952, retirement effective Dec. 1, 1960.

TRAFTON—Herbert W., Dept. 197-1. Seniority date Feb. 14, 1951, retirement effective Feb. 17, 1961.

Deaths

BOURCY—Roy J., Dept. 171. Died Feb. 11. Survived by wife, Maxine; one son, Jerome L.; three daughters, Mrs. June Edney, Darla D. and Vickie L. Bourcy; three brothers; and one sister.

JONES—Carter H., Dept. 99, formerly in Dept. 231. Died Feb. 22. Survived by wife, Juanita F. Jones, six daughters, one son, six sisters, one brother, eight grandchildren.

QUAST—Orval G., Dept. 31. Died Feb. 23. Survivors include wife, Jean Elizabeth Quast, mother, brother.

Promotions

SAN DIEGO

Promotions to or within supervision effective Feb. 13.

Dept. 6-4, Engineering: To senior value control group engineer, W. H. Schaefer.

Dept. 7-40, Electronics: To asst. foreman, B. E. Shelton.

Dept. 15-1, Customer Service: To service parts general supervisor, W. T. Elliott. To service parts administrative supervisor, J. W. Ensign Jr. To service parts administrative asst. supervisor, L. Hayes.

Dept. 31, Plant Engineering: To asst. foreman, M. R. Davis, F. J. Stepinski.

Dept. 137, Jet Transport Aft Fuselage Structure: To asst. foreman, P. R. Jones.

Dept. 141-1, Jet Transport Delivery Preparation: To asst. foreman, D. L. Anderson.

Dept. 192-2, Manufacturing Control: To M/C asst. foreman, M. A. Wiltse.

Dept. 215, Machine Shop: To asst. foreman, H. A. Rasmussen, R. M. Shuck.

Dept. 288-2, Inspection-Plant 2: To inspection asst. supervisor, L. G. Brenn.

Lost & Found

SAN DIEGO

LOST—Man's wedding band, inset with three small diamonds. Lost in vicinity of Bldg. 1, Plant 1, on Feb. 1. Reward. Finder contact W. G. Asuncion (Dept. 133), CO-4-4306.

LOST—Tri-focal glasses with horn-rim frames. Lost at either Plant 1 or 2 on Jan. 12. Contact Bert Freakley (Dept. 280 retired), AC-3-3407.

Personals

SAN DIEGO

I wish to express my sincere appreciation to all my friends at Convair SD Plant 1 and 2, and Rose Canyon for the cards, flowers, and messages of sympathy at the death of my mother, Urbana Casillas.

Dolores Casillas, Dept. 91-8, Plant 2.

$1,500 Con-Trib Gifts Okayed

Six San Diego charitable groups shared attention of Convair SD Employees' Con-Trib-Club Committee at the Feb. 15 meeting.

Pathfinder's of San Diego, Inc., operated by Alcoholics Anonymous for rehabilitation of alcoholics, will get $500, and $1,000 will go to San Diego County Council of Churches for the Senior Citizens' Lounge.

Sunnyside Guild, Inc., is under consideration for $1,000 for operating expenses incidental to the training program for handicapped children. In another assist to a children's philanthropic group, $2,750 was approved in first reading to San Diego County Association for Retarded Children to help pay for a new bus to replace the one purchased by Con-Trib-Club in 1956. The bus transports retarded children to and from the Child Development and Youth Activities Center in Mission Valley.

Tentative approval also was given a $3,000 donation for memberships in local YMCA branches, and $5,000 for the current Heart Fund campaign.

United Fund has asked that $10,000 of the Con-Trib-Club special projects fund be set aside as an emergency reserve.

★ Convairiety ★

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Approximate current total circulation, over 70,000. News items and letters to the editor are solicited, but no advertising can be accepted.

SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Grayce Fath, Helen Pemberton, Fred Bettinger.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.

Famme Assumes Asst. Div. Mgr. Post; McLaughlin Takes Over in Factory

(Continued from Page 1)

In the new post of superintendent, Change Implementation Board, Harry Rote will be reporting to McLaughlin as permanent factory representative on the board which reviews all jet transport changes.

Rote has been with Convair in all phases of production since 1938. A foreman and assistant superintendent of B-24 final assembly, he was general foreman of electric bench in 1951 after a stint in tooling, proofing and mockup, later transferred to final assembly in Convair-Liner days. He has been superintendent of jet transport major mate and final assembly in the 880/990 program.

Tabbed for the new assistant factory manager positions, directly responsible to McLaughlin, are: Ed Robinson, Steve Barinka, Bill Reed, A. B. McFarland, all long-time production men.

Robinson will be in charge of fabrication, fuselage, wing structure. Barinka heads primary and final assembly, and field operations. Reed is in charge of Plant 2 operations and Astronautics assist work. McFarland is assistant factory manager responsible for experimental factory.

Joining Convair in 1935 as a wing assembler, Robinson rose through the ranks to assistant factory superintendent in 1942. He held superintendent posts in the B-36, B-50, and T-29 years; went on to superintendent of F-102 major and final assembly.

Barinka has spent most of his 20 years with Convair in field operations and flight test preparation. He came to Convair in late 1940 as superintendent of B-24 bomber field operations. He served at Convair Fort Worth during 1950 as superintendent of B-36 field operations and returned to SD the next year to take charge of B-36 modification field operations. He headed Plant 1 field operations until 1957 when he was made superintendent of the 880 program. He goes to his new assignment from superintendent of all jet transport field operations.

Reed first joined Convair in 1941 in primary assembly and served as foreman, and assistant general foreman in B-24 final mating and experimental until 1952 when he was made superintendent of Plant 1 fabrication. He left the company in 1954 for responsible positions with the H & B American Machine Co., Indianapolis, Ind., and U. S. Chemical Milling Co., Manhattan Beach. He rejoined Convair last fall as superintendent assigned to the factory manager's office.

McFarland has been closely identified with experimental from the time he came to Convair in 1940. He was made superintendent of experimental factory in 1948 and experimental factory manager in 1953.

Superintendents under Robinson are Al Johnson, Plant 1 fabrication, metal bond, trim, and plastics, and Paul Pearson, fuselage and wing, structure, doors, pod and pylon.

Johnson has been at Convair since 1936, holding general foreman and superintendent posts in sheet metal, work management, R3Y assembly, and factory manager's office. He was named Plant 1 factory manager in 1952. Lately he has been superintendent of Plant 1 fabrication.

Pearson came to Convair in late 1935 and has held responsible positions in many production



Paul Pearson



Al Johnson



Lee House



Harry Rumbaugh



Les Boring



Eric Johnson

operations through the PB4Y2, B-36, F-102 and F-106 days. He was general foreman of B-36 outer panel, and later, Model 8 wing and tail.

Reporting to Barinka as superintendents are Les Boring, wing primary, major mate, and final assembly; Lee House, in charge of fuselage primary, mockup, post delivery installation, electric bench, tubing. Harry Rumbaugh is superintendent of field operations.

Boring has been at Convair since 1940 holding foreman, assistant general foreman posts in a variety of operations—final assembly, electronics, armament, electric bench, proofing and mockup. In 1957 he was made general foreman of Model 8 final assembly.

House came to Convair in 1936 in the old hull department. By 1942 he had risen to assistant general foreman, and then spent a couple of years, 1943-45, as general foreman of the Santa Ana feeder shop. He served as general foreman of jet interceptor fuselage primary, post production service, before going into the jet transport program in 1958, as general foreman of proofing and mockup. Lately he has been directing jet transport post production.

Rumbaugh, veteran flight and field operations man, has been at Convair since 1940. In 1953 he was named chief of Model 8 field operations and went to Palmdale off-site facility with first jet interceptor activities there. Before he took over as Palmdale manager in 1959 he was in charge of Palmdale field operations.

Eric Johnson, who came to Convair in 1951 as assistant to the division manager, will be in charge of all Plant 2 fabrication, welding, sub-assembly, electric bench, reporting to Reed. Johnson had held positions of assistant factory manager and factory manager at Plant 1 during the years from 1952 to 1958. He was made night manager in 1958.

On the general foreman level the following will report to Al Johnson: Gerry Cox, Frank Garrison, Lee Stamper, Jack Benedict. Assistant general foremen on the second shift are George Carroll and Ford Link.

Reporting to Pearson as general foremen are: Cliff Clark, Ben McMicken, John Strachan; Jerry Wilson, second shift.

J. F. Ames is general foreman, and Carl Uhl, assistant general foreman-second shift, under Boring.

Reporting to House are Jack Bryant and Bill Holland; Bill Nader, second shift.

Under Rumbaugh are Frank Stevens, Jim Good. Frank Pyatt is assistant general foreman, second shift.

General foremen under Eric Johnson are B. L. Wolfe and R. L. Williams; Vern Logan, assistant general foreman, second shift.

Other appointments were due to be made to complete the factory supervisory list designed to strengthen the reorganization structure, said Loomis.

Harper Customer Service Manager

O. W. Harper was appointed manager of customer service at Convair SD effective the middle of last month, according to R. C. Loomis, Convair vice president and SD manager, in an announcement of new personnel appointments.

Harper had been acting manager of customer service since the fall of 1959 during the time J. J. Alkazin, former manager, was on special assignment with commercial sales.

Alkazin has been named administration manager on the control staff of Support System 476L, reporting to W. W. Fox, SD chief engineer, manager of the program.

Other control staff members are: E. L. Williams, air vehicle manager; V. M. Burns, sub and associate contract manager; J. J. Wheeler, logistics manager; W. T. Dorrance, cost and schedule manager. All report to Fox.

Blood Volunteers Donate 199 Pints

Convair SD's blood supply, which had dropped below zero, received a big shot in the arm Feb. 23 when Plant 1 donors gave 199 pints.

The Convair blood donor committee thanked both those who gave blood and those who signed up and reported but were not accepted because the supply of bloodmobile equipment was exhausted.

The February collection will pay off the Convair deficit at San Diego Blood Bank and leave some over.

Hypervelocity Flight Study Series Slated

(Continued from Page 1)
ture of the upper atmosphere of the earth will be discussed.

Opening lecture will be March 9 in the Navy Electronics Laboratory auditorium, 7-9:30 p.m., when S. A. Schaaf, professor of engineering, University of California at Berkeley, will present introductory concepts in the kinetic theory of gases.

He will be followed each Thursday evening for the next 14 weeks by recognized authorities including two Convair San Diego physicists, I. Oppenheim, and S. Rand.

Other speakers will be Lester Lees, professor of aeronautics, California Institute of Technology; Gerhard F. Schilling, associate head planetary sciences department, Rand Corp., Santa Monica; Frank C. Hurlbut, manager of aeronautical sciences laboratory, U. of California, Berkeley; Francis Johnson, manager space physics, Lockheed Missile & Space Division; Richard Schamberg, associate head aero-astronautics department, Rand Corp.; Samuel Silver, director electronics research laboratory, U. of California, Berkeley; Andrew F. Charwat, associate professor of engineering, UCLA; Ronald F. Probstein, professor of engineering, Brown University, Providence, R. I.; Raymond L. Chuan, director engineering center, USC; Christos G. Stergis, chief photochemistry laboratory, Air Force Cambridge Research Laboratories; Eugene Levin, manager orbital mechanics department, Aerospace Corp., Los Angeles; John R. Sellars, director aerosciences laboratory, Space Technology Laboratories, Inc., Los Angeles.

The course, designated as Engineering X 414MNO, is open to anyone with a bachelor's degree in engineering or science. Cost is $50. Students who wish 3 units credit must take a final examination. Registration is being accepted at University Extension office, 1221 Fourth Ave., SD, BE-2-7321.

SD Man Continues Studies at Jaycee

Terrance L. Brown, 26, could appropriately be described as a man who is leading "three lives."

During the day, Brown is a student. Last month he was nominated for the Bank of America-Junior College business award. For the past year or more Brown has carried 12 to 15 units at San Diego Junior College, expects to receive his Associate of Arts degree in June.

At night, Brown works full-time at Convair SD in Dept. 188-7 (inspection). In his third "life" Brown is at home with his wife and three children.

Even after he receives his degree in June Brown intends to keep going. He has already made plans to continue his education at Cal-Western University.

Welsh Transferred To Post at Astro

C. E. Welsh of Convair General Office has transferred to Convair Astronautics as chief of revenue management, reporting to Convair Astronautics controller.

Succeeding Welsh as G. O. executive adviser, reporting to J. D. Eiland, director of general accounting, is W. Ray Crain, who came to Convair from Rheem Mfg. Co., at Downey, Calif. Crain had been connected with Convair from 1943 to 1951, serving as representative at New Orleans Division, then in Convair G. O. as assistant, and, later, as SD contracts administrator.

In his new appointment he will be chairman of the Convair G. O. contract termination committee.



B-58 BUILDERS—Distribution of Convair FW's nearly 5,000 active vendors in 44 different states is shown above. Nearly $265 million is to be spent with these far-flung vendors during 1961. Approximately 50,000 individuals are concerned in manufacturing.

Stromberg-Carlson Outlets Increased In San Diego Area

Three new dealers have been named in the San Diego area to handle Stromberg-Carlson stereophonic equipment and components.

Added to approved outlets are: Thearle Music Co., 640 Broadway; Southern California Music Co., 630 C St., and 240 Mission Valley Hwy.; and Walker Scott Department Store, College Grove.

Others are: Borgen's Music Co., 700 Broadway; High Fidelity House (components only), 1635 University; and Hamilton Appliance and Radio Co., 7865 Girard, La Jolla.

Through a company agreement, Convair people, both at SD and Astro plants, are entitled to a 25 per cent discount off list prices. The discount does not apply, however, on any specially-priced promotion models authorized by Stromberg-Carlson through the dealers.

Convair purchasers must present a signed employee purchase agreement to the authorized dealer at time of purchase. Price lists and purchase forms are available at both SD and Astro employee services.

C. E. Nevitt to Talk Before Symposium

C. E. Nevitt of FW educational services will be featured speaker at a March 11 symposium for secretaries at Hotel Texas. His topic: "Human Relations."

The symposium is sponsored by Trinity chapter National Secretaries Association, and Fort Worth chapter National Office Management Association.

Mrs. Margie Earle, Dept. 11, and Mrs. Pauline Leath, Dept. 2-8, are members of the symposium committee.

Delta Pilots Delighted With 880s; Air Line Reviews First Nine Months

During their first nine months flying for Delta, 880 jets have flown 248,765,000 seat miles, carrying 174,244 passengers a total of 151,766,000 revenue miles.

Delta received its first 880 a year ago and inaugural service started May 15, Atlanta to New York, New Orleans to New York and Houston to New York. On July 1 Convair 880 service expanded to include Atlanta-Dallas, New York-New Orleans-Houston. A month later the 880 was put on the Chicago-Atlanta, Chicago-Memphis-New Orleans, and Chicago-Houston flights. Chicago-St. Louis-Houston and Houston-New Orleans-Baltimore-Washington-Philadelphia service was added Oct. 30. Cincinnati received its first 880 service Dec. 16 with a non-stop flight to Miami and the same day Convair started a Miami-Chicago non-stop flight.

Delta reported that during the year of Convair 880 operation 41 captains and 36 first officers have been checked out and 738 training hours logged.

Delta now has nine 880s in operation and will receive three more this year.

Veteran Delta pilots have been generous in their praise of 880 performance.

★ ★ ★

Capt. Charles Walker: "The Convair 880 is the finest airplane I've ever flown. During ground school Convair provided figures on its performance. This was before certification. Since then, of course, I have had ample opportunity to check these figures under operating conditions . . . From a pilot's standpoint it couldn't be better.

★ ★ ★

Capt. H. R. Harwell: "It just jets up and goes — a wonderful airplane." (Harwell, dean of Delta pilots, taught himself to fly in 1925 in a Thomas Morse Scout which he purchased in San Diego for $75. His mother, 77, was among passengers who flew with Harwell on an early 880 flight.)

★ ★ ★

Capt. Howard Reid: "It is a great feeling to work with a company that is able to provide customers with such a fine piece of equipment . . ."



Capt. Charles Walker of Delta Air Lines is among many who have praised 880 performance.

★ ★ ★

Capt. Dick Schoofs: "The Convair 880 is the airplane pilots dream about flying. It's steady, fast and has excellent flight qualities. Passengers are just as enthusiastic."

★ ★ ★

Capt. Ernie Deacon: "It's a real fine airplane, plenty of power, sturdily built with excellent performance, behaves beautifully in rough air. Both Convair and General Electric service and training personnel have been very cooperative and helpful."

★ ★ ★

Capt. Clyde Mills: "The best plane I've flown. It has lots of power and the most dependable engines I've known."

★ ★ ★

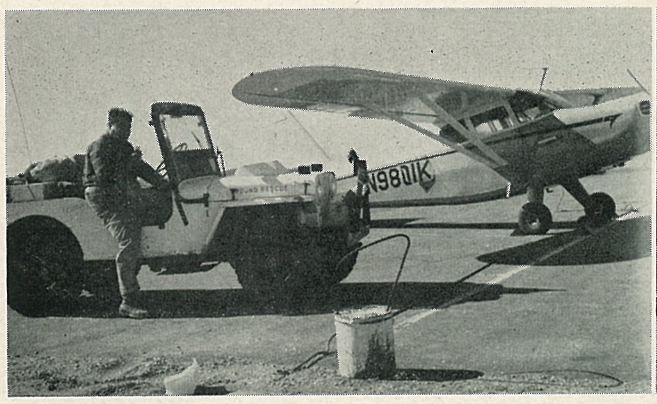
Capt. Ray Bunnell: "I love it. Its power is phenomenal, and the plane's sturdiness can't be beat."



Capt. Harvey Harwell, dean of Delta Air Lines pilots, (top center) added his praise of 880 after inaugurating new 880 route. With him are Paul Higdon and Jerry Crockett, with Stewardesses Betty Herrington, Pat Legener, Carolyn Jacoby.



BUSY, BUSY—Though Delta Air Lines' Convair 880s have been flying Delta routes for many months, they still attract extra customer attention. Above, right, 880 taxis before new Atlanta, Ga., terminal. At left 880 is parked on ramp of New Orleans terminal building, while in center, luggage and freight goes aboard at New Orleans.







DESERT DRIVE—Annual Rough Riders jeep jaunt, co-sponsored by Convair SD Jeep Club, last month attracted 82 vehicles, and some 250 persons. In left photo is Convair pilot B. G. Pierce who stood by if needed for rescue operation. Center photo shows jeepsters taking lunch break in foothills of Santa Rosa Mts. At right, water from artesian well is sampled. Well was drilled by government during World War II.



ROCKY ROAD—Annual Rough Riders run held Feb. 4-5 was no place for Sunday drivers. Jeeps jolt along typical desert "road," selected especially for event.

Space Station Mockup Will Include Kitchen

Convair's pioneering efforts in space research reached a new milestone recently with Astronautics' erection of a full-scale working mockup of what may be America's first multi-man space station.

The mockup, located adjacent to the vacuum facility at the east end of Astro's space research building (Bldg. 28) is part of a Convair-sponsored study designated Manned Astronautical Research Station (MARS).

It will be made available to other companies to encourage cooperative life support systems research by private industry.

The mockup consists of a steel tank, 10 feet in diameter and approximately 14 feet tall. Beneath the tank is an inverted cone which simulates a Mercury-type re-entry vehicle. Overall height is 28 feet.

A steel floor inside the tank divides it into an upper "working" compartment where equipment for carrying out the space station's mission will be installed, and lower "housekeeping" compartment with cooking and sanitary facilities. Sleeping quarters for the crew will be located in the "re-entry vehicle."

"By May, we will begin preliminary testing. Ultimately tests of a variety of components and complete life support systems will be performed in the mockup," explained John O. Tearnen, design specialist heading the life support systems group (Dept. 595-6).

Manned tests in the mockup will permit evaluation of such facets of space survival as oxygen supply systems, contaminant filters, waste disposal units, water regeneration systems, food storage and preparation techniques, etc.

"Simulation of space conditions will be almost complete, since by use of the adjacent vacuum facility, we can reduce atmospheric pressure within the tank to 11, eight, or even five pounds per square inch," Tearnen added. "The only thing we cannot simulate here is lack of gravity."

The MARS study is a preliminary step leading to a manned space station which could be boosted into orbit by the Atlas-Centaur high-energy space probing vehicle built by Convair for the National Aeronautics and Space Administration (NASA).

Tearnen's co-workers on the MARS study are George Drake senior thermodynamics engineer, and Edwin Russ, dynamics engineer, all of Dept. 595-6, and Phillip Yip, senior aerodynamics engineer of Dept. 595-1.

Atlas Test Series All 'Runs' and 'Hits'

MSTS—About daybreak recently Test Stand 1-4 here wrote "completed" for a test program that has been unusual in many respects.

At that time Astronautics test personnel finished the eighth and final static test on an "E" series Atlas.

This marked the first occasion in the entire Atlas test program here in which a complete series of tests was conducted with no countdown aborts or unsuccessful tests.

The program logged 1,501 seconds of engine operation and accomplished 32 test objectives satisfactorily.

Rocky Going

Jeep Pilots Tackle Tough 'Sunday Drive'

When some 250 persons piled into 82 jeeps one Saturday morning last month to go for a "Sunday drive," they only knew one thing for sure — it was going to be rough.

In fact they had been promised that it would be the ruggedest trip ever co-sponsored by the Convair SD Jeep Club and the San Diego Ridgerunners.

And it was. Especially with the help of a sandstorm Saturday noon that rocked the caravan back on its rear wheels and sent them angling to the base of the Santa Rosa Mts. for shelter.

When Art Thomas, Convair SD cruise leader of the expedition, had plotted the course on a previous weekend it took approximately 5½ hours to go six miles and 45 minutes to climb 120 feet up one hill.

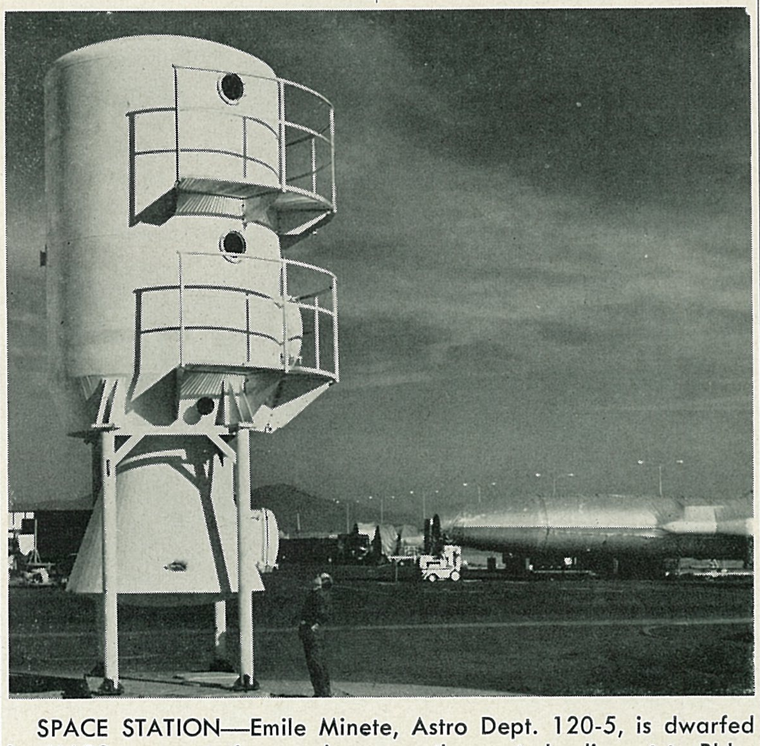
"The jaunt was about as tough as we could make it and it was a complete success, with the exception of the sandstorm that made things chokingly uncomfortable," said Thomas.

Departure was from Truck Haven on Hwy. 99, north of Salton Sea Riviera. Jeeps headed west into the Borrego desert, swinging up to the Santa Rosa Mts. and Four Palm Spring Oasis.

"We were prepared for almost any emergency," said Thomas. "A Cessna 182 was stationed at Salton airport to fly the injured out. We also had a radio link to San Diego. But the precautions proved unnecessary, as no serious mishaps marred the trip."

The entire route covered only 11 miles, yet took all of Saturday and part of Sunday to navigate.

Most of the drivers maneuvered their four-wheel drive vehicles with considerable skill. One motor was rammed through the radiator and a few front ends were smashed in, but these are considered "normal" occurrences, according to Thomas.



SPACE STATION—Emile Minete, Astro Dept. 120-5, is dwarfed by MARS space station mockup recently erected adjacent to Bldg. 28 at Astro's plant in San Diego. Three-compartment mockup will be used to test life support systems for what may be country's first multi-man space station.

Scholarship Qualifying Tests Set For March

Convair sons and daughters who are juniors in high school are reminded that most schools offer National Merit Scholarship qualifying tests during the month of March.

Scores from these tests will be used to evaluate candidacy of applicants for the 1962 General Dynamics Merit Scholarships (formerly Convair Sons Scholarships).

Because the General Dynamics scholarship program is now in its first year of operation, special arrangements will be made for Convair sons and daughters who are presently seniors in high school. Seniors who wish to qualify for the 1961 scholarships should contact educational services at their respective operating divisions for information.

A total of six GD scholarships will be awarded each year to Convair children. Amounts range from $250 to $6,000 apportioned over four years of college work.

In Fort Worth, scholarship examinations are slated March 7 or 11. Other Convair students should consult their school counselors concerning dates in their areas.



REAL POPCORN? — It is. Mrs. Roberta Chisolm, Dept. 6-5, "models" popcorn used as "cushion" for shipping components of sensitive punch system to Convair FW.

Delicate Parts Packed in Popcorn To Assure Safe Delivery to FW

They've found a new use for popcorn: shipping packages.

Ten boxes arrived at Convair FW recently from Tally Register Corp. They contained highly sensitive components for the verifying punch comparator system being installed here. The machine prepares "tester tapes" for B-58 systems.

Each component was wrapped in a polyethylene bag, and completely surrounded by white, crunchy popcorn.

"Popcorn is easy to handle and cheap to use," explains Tally representative Stewart Borger. "And it saves time in packing."

Charley Davis, design engineer in charge of the machine operation at Convair FW, claims these are the first packages he's seen delivered with popcorn as a "cushion."

Industrial Engineers Hear Astro's Carter

Tod F. Carter, supervisor of indirect methods at Convair Astronautics, was a featured speaker at the Feb. 18 meeting of the American Institute of Industrial Engineers held at San Diego State College.

More than 150 industrial engineers, system and office managers, heard Carter speak primarily on Convair's industrial engineering techniques to curb soaring high costs of "paper work."

ENGINEER HONORED BY SCHOOL'S P.T.A.

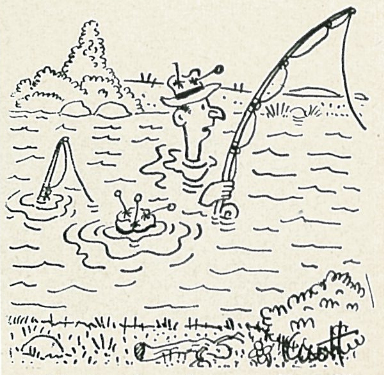
George L. Stiehl, thermodynamics engineer at Convair SD, was made a life member in the Longfellow Elementary School P.T.A. last month for his outstanding service to children and youth in the Clairemont community.

Librarian Will Speak On Writer Markets

Mrs. Ruth Yeager Rogers, librarian in FW Dept. 6-6, will speak on "Marketing Your Writing" before members of the newly-formed Armed Forces Writers League, Fort Worth Area Chapter, March 13 in CAFB information office. The meeting starts at 7:30 p.m.

The League is an unofficial, non-profit organization for military and allied civilian personnel interested in journalism and art. Convair employees are eligible on a non-voting basis. Members are provided individual manuscript criticism, specialized information, assistance to beginners, and discounts on writers' magazines.

Mrs. Rogers, secretary of the local group, said membership is open.



"This too deep for you, Shorty?"

Dip Foreseen In EB Trades

GROTON — An imbalance of production work for installation trades will result in a series of terminations over the next six to eight months affecting possibly 700 employees at Electric Boat Division.

Despite a backlog of submarine construction, only two submarines, the Ethan Allen and the Thomas A. Edison, have advanced far enough to effectively utilize the installation trades. This group includes pipefitters, sheet metal workers, outside electricians and outside machinists.

While during 1961 there will be a slackening of activity for installation trades, it is anticipated that there will be need for additional personnel in the hull trades. Wherever possible these vacancies will be filled by transfers, minimizing the number of layoffs.

Although the division was assigned two Polaris submarines subject to competitive proposals and has contracts for another four A-subs, the keels for these will not be laid down for some weeks because of long lead time for steel and components.

Oertel Appointed To GD/E Liaison

E. C. Oertel, former chief electronics engineer at Convair SD, will coordinate Convair San Diego activities in the electronics field within the engineering department as assistant to W. W. Fox, chief engineer.

Effective Feb. 16, Oertel was named assistant chief engineer—electronics by SD Manager R. C. Loomis to represent the SD operating division in customer contacts and coordination with the newly-formed General Dynamics/Electronics.

His appointment carries responsibilities of coordination of SD electronics activities; customer and contractor contacts; customer requirements; contacts with other Convair operating divisions on electronics matters; assurance of adequate research, development, facilities, and capabilities in electronic areas at SD.

Junior Achievement Honors M. J. Scott

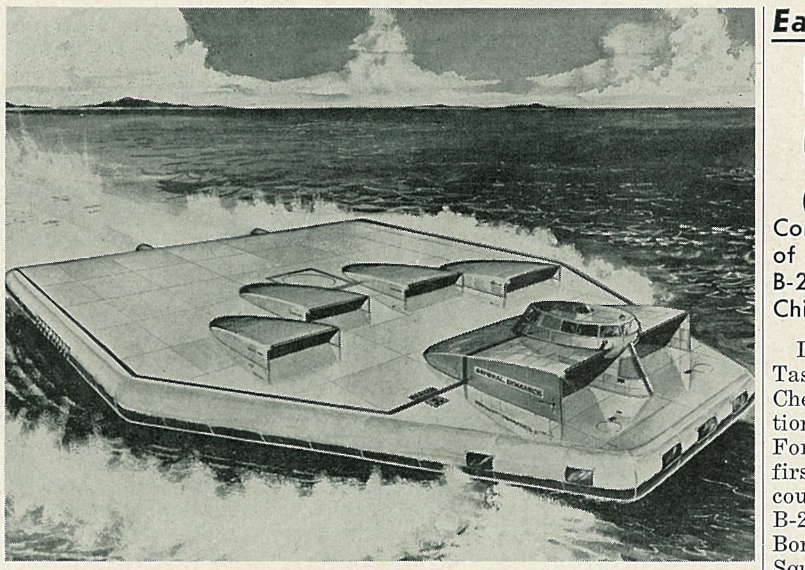
M. J. Scott, Convair FW supervisor of suggestions, has been named vice president of facilities, Junior Achievement for Tarrant County for 1961.

Scott has served for the past five years on the organization's board of directors.

In addition, he's been active in Convair Management Club's Junior Achievement activity, serving as adviser, chief adviser and chairman.

SALVAGE YARD SCHEDULE GIVEN

Salvage yard schedule at Convair San Diego and Astronautics plants will be: SD—March 4 and 18; Astro—March 11 and 25. Hours at the Convair SD yard are 7:30 a.m. until noon; at Astro, 8 a.m. till noon.



NUCLEAR POWERED—Engineers from two General Dynamics Corporation divisions (General Atomic and Convair) recently described this nuclear-powered ground effects machine which can hover over land, sea or ice, or cruise over surface on air cushion.

GENERAL DYNAMICS CORPORATION NEWS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of seven divisions and a Canadian subsidiary, Canadair Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missile, and space systems.

Electric Boat of Groton, Conn., submarines.

General Dynamics/Electronics, Rochester, N. Y., Los Angeles and San Diego, Calif., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.

Material Service Division, Chicago, Ill., building materials, concrete products and coal.

* * *

GD/E Designs Controls For South Pole Reactor

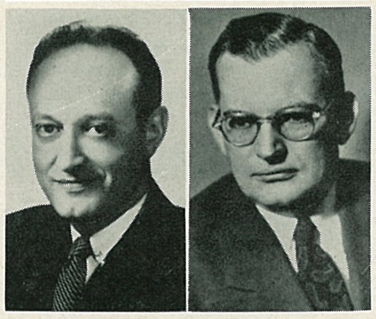
General Dynamics/Electronics will design and construct the instrumentation and control system for a nuclear power reactor now being built for installation at the South Pole.

The reactor, being built by the Martin Company, will provide electric power for the United States base at McMurdo Sound in Antarctica.

The $164,000 GD/E contract calls for all instruments and controls for the nuclear reactor and steam generator equipment. Advanced techniques in solid-state circuitry will be employed extensively for compactness and high reliability.

A feature of the equipment will be automatic self-checking circuits which will immediately inform the operator of the presence and location of any malfunction in the instrumentation.

NEWS NOTES — The General Dynamics advertising campaign, "Vision-Reality," was ranked second among printed industrial advertisements in the annual survey by Printers Ink, advertising trade magazine . . . Frank Pace Jr., has been elected to the board of trustees of the California Institute of Technology in Pasadena . . . Electric Boat Division is operating the largest algae "farm" in the world as part of a research program to help determine man's ability to rely on algae for food and oxygen when traveling in space.



At left is Richard L. Knight, new senior vice president-finance for General Dynamics, and at right is Edward J. Williams, new vice president-manufacturing.

Airframe Overhaul Cycle at 13,500 Hrs.

MONTREAL — Airframe overhaul cycle for the Canadair Forty Four, based on the use of a continuous maintenance program, has been established at 13,500 hours as a start. This cycle makes use of inspection frequencies practiced by major airlines to avoid excessive interference with flight operations.

The 13,500-hour figure was set at a recent meeting at Canadair between the FAA and three cargo airlines.

EB Will Get Set For Polaris Subs

GROTON — Construction work designed to increase the capability of Electric Boat Division to build the newer and bigger Polaris-firing Fleet Ballistic Missile submarines began this week.



"According to our new budget, this is the week you eat . . ."

Early War Years

Determined Fighter Attacks Greeted B-24s' China Strikes

(With this installment, No. 54, Convairiety's continuing history of Convair recalls activities of B-24 Liberators operating in China).

In July, 1942, the China Air Task Force (Brig. Gen. Claire L. Chennault) was set up for operational command of the 10th Air Force's units in China, and the first heavy bomber strike in that country was staged Oct. 21 by B-24s of the new India-based 7th Bombardment Group. The 436th Squadron (Maj. Max R. Fennell) took off from Chengtu to strike the Lin-hsi coal mines, beyond Tientsin.

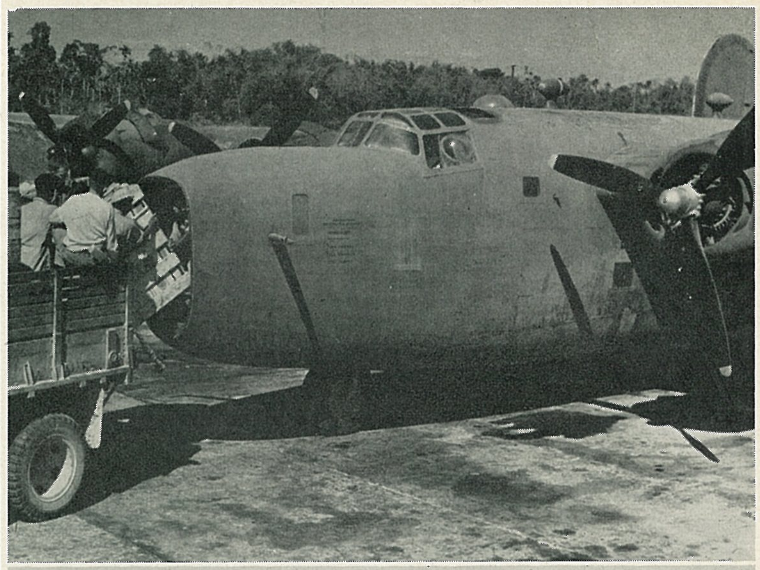
In India, the 7th Group consisted of four full Liberator squadrons—the 436th and 492nd, based at Gaya; and the 9th and 493rd, at Pandaveswar. In November these B-24s began strikes at Mandalay and demonstrated their long-range hitting power Nov. 28 with a 2,760-mile round trip attack on Bangkok, seriously damaging an oil refinery. On Dec. 30, 20 Liberators nearly destroyed Monywa in central Burma.

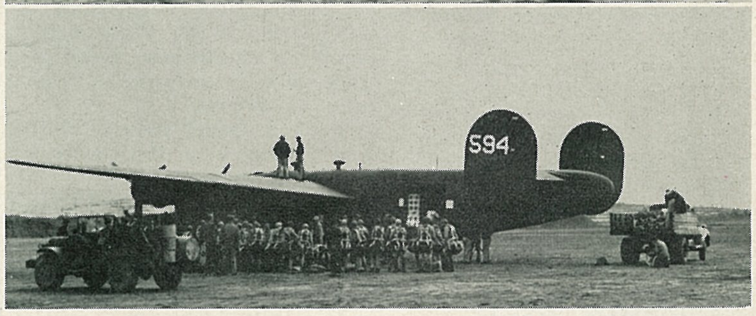
The 14th AF (Chennault) was activated in March, 1943, with headquarters at Kunming, and a new B-24 outfit, the 308th Group (Col. Eugene H. Beebe) was ready for its first mission May 4. Eighteen Liberators traversed the Gulf of Tonkin to hit Sama Bay on Hainan Island, facing the China Sea. Hits were scored on the airdrome, docks, an oil refinery and a fuel dump. On May 8 the heavies attacked Tien Ho airdrome at Canton, and then retired to ferry in fuel, bombs and supplies from India. (The 308th had a unique and onerous distinction among Liberator groups. As a condition of operating in China it was required to furnish all of its own supplies by flying shuttle runs over the Hump!)

In June, Japanese forces were pushing up the Yangtze toward Chungking and the alarmed Chinese called for air support. Liberators escorted by Chinese fighters operated from a Chengtu field, plastering enemy troops in the Yangtze gorges until they began to fall back.

The Japanese appeared bent on destroying the heavy bombers. Their fighters often passed up B-25 bomber flights altogether to concentrate on the Liberators. This proved disastrous for the 425th Squadron in a strike on Hankow Aug. 24, made by heavy and medium bombers with an escort of P-38s and P-40s. The squadron's seven planes made an excellent run despite heavy anti-aircraft fire, severely damaging an airdrome, but were attacked immediately afterwards by a swarm of 40 enemy fighters. After a 45-minute battle only three Liberators remained, all badly crippled, and one of these crashed on the return to Kunming, killing 10 of the 12 men aboard.

In November, 1943, the 308th Group's Liberators were transferred temporarily to India to join the 14th AF and RAF in an Allied air offensive against Rangoon, a blow conceived by Maj. Gen. George Stratemeyer, the Southeast Asia air commander. AAF Liberators and Mitchells were to strike by day, RAF Wellingtons and Liberators by night. Bad weather hampered the operation, and savage Japanese interception made the cost high, the 308th suffering six B-24s destroyed and five seriously damaged in a single strike. The most successful mission was flown Nov. 27, when Liberators and Mitchells destroyed an estimated 70 per cent of the Insein locomotive works.





TRANSPORT—In top photo, freight is loaded into nose of Convair C-87, Liberator modified for transport purposes. Below, Chinese troops prepare to board C-87 at Yunnanyi Air Base in China, en route to Burma frontier.

Liberator That Crash-Landed at Tucson Converted to Prototype For C-87

Desperately short of four-engine transports in the early months of World War II, the U.S. turned to the deep-bodied, far-ranging B-24 for an answer.

In a way, it was an "accident" that led to the B-24 transport version, designated the C-87.

Early in 1942 a B-24 crash-landed at Tucson, Ariz. The wrecked bomber was repaired with fixed landing gear and other improvisations and returned to San Diego where I. M. Laddon, then chief engineer, supervised a three-week modification job that turned the bomber into a rough transport.

"There wasn't time for drawings," Laddon recalled later. "Col. Carl Brandt (the Air Force plant representative) and I did it mostly by waving our arms and pointing to show where we wanted equipment taken out, a deck laid or an opening cut." The plane then was flown to Washington, where Gen. H. H. Arnold inspected the aircraft and immediately ordered production of a quantity of them.

The program was assigned to the new Fort Worth plant, which had just started its production of 150 B-24Ds, assembled from component parts shipped from San Diego. Conversion started with the ninth plane, which was delivered Sept. 14, 1942. Conversion production totaled 70 standard C-87s and three de luxe C-87As. Thereafter, C-87s were built as transports from scratch, final production totaling 291, less five converted as AT-22 trainers. The last C-87 was accepted Aug. 10, 1944. The unit price in latter stages was $140,000.

Registration Deadline Set For Hunter Safety Classes

All Convair SD and Astro sons and daughters who intend to take a CRA-sponsored hunter safety course before the end of the current school year should register during the next two weeks.

Instructor Arnold Schrock, who last month received a training award from the National Rifle Association, is compiling a list of students so that classes can be coordinated accordingly.

Registrations can be placed by calling Schrock, weekdays after 5 p.m., at BR-7-4958.

Classes have been overflowing almost continuously since they were resumed last year. Some 120 Convair SD and Astro sons and daughters have been instructed by Schrock in the handling of the .22 rifle and shotgun.

The course is required for young persons under 16 years of age so they can obtain their hunting license in compliance with California state law.

Students are asked to furnish their own guns if at all possible. A limited number of club rifles, however, are on hand. A 50-cent fee covers instruction book, ammunition and brassard.

SD Management Club Golfers to Play El Camino

A real golf "spectacular" is slated for members of Convair SD Management Club when the sixth annual club sweeps is played Sunday (April 16) at El Camino Country Club.

It will feature a free breakfast and early starting times for everyone — club foursomes will tee off on both nines between 7 and 10:30 a.m.

Reservations will open Wednesday (March 15) and close when a limit of 120 golfers is reached. Inga at ext. 468, Plant 1, will take entries.

The tourney will feature four handicap flights and two "blind" handicap brackets. First-line golf balls will be given as prizes.

Breakfast will be served, compliments of Management Club, and golfers should arrive at the club at least 30 minutes prior to their starting time. El Camino is located between Oceanside and Escondido on Hwy. 78 approximately two miles from the Hwy. 101 turnoff. It is about a 45-minute drive from downtown San Diego.

Green fees will be $3. C. W. Maxfield and Gerry Cox are co-chairmen of the event reporting to club board of control member D. R. Bryson. For additional information contact Maxfield at ext. 694 or Cox at ext. 468, both Plant 1.

Flying Club Seeks Former Members For Dinner Dance

Former members of the 25-year-old Mesa Flying Club (now San Diego Flying Club) are being sought for a special event among Convair Astronautics and Convair San Diego employees.

Organized within Consolidated Aircraft in 1936, the group has always contained a high percentage of members working for Convair. Presently, about one-third of the 54 active members work for Convair.

Commemorating a 25th anniversary, the group will hold a dinner-dance March 4 (Saturday) at the Officer's Club, Marine Corps Recruit Depot.

Information and reservations are available through Henry Le Boffe of Astro at his home, AT-4-4785, or Keith Alexander of Convair SD at home, BR-3-2535.

The March 4 event is open to all present and former members of the group, now numbering something like 550 persons.

Bowl Tourney Deadline Near

All Convair SD keglers are urged to fill out entry forms as soon as possible for the annual plant championship bowling tourney which gets under way March 25 at Pacific Recreation.

Registration forms are now available at employee services, both plants, and from secretaries of regular Convair leagues, according to Jim Hayman and Mike Brooks, co-commissioners of bowling.

Team events will be rolled the March 25-26 weekend followed by singles and doubles competition April 1-2 and 8-9.

Early entries will be assured of getting their preferred starting times. Everyone will have a chance to win awards as the tourney is set up on a handicap basis.

Deadline for entries is midnight March 11.

Ron Hendrichs Leads Golfers

Ron Hendrichs (Dept. 14) shot a low gross 70 last month at Circle R to lead 145 golfers entered in the SD CRA sweeps.

At 77 were Ray Minutello (Dept. 6) and Glenn Grantham (Dept. 133). They tied for second low gross. Low net leader in the first flight was Ralph Way (Dept. 400) with 65, followed by Doc Larman (Dept. 180) with 66.

Low gross leaders in the second flight were Eric Torp (Dept. 91) and Will Weidenfeller (Dept. 3) with scores of 77 and 82. Bill Severson (Dept. 400) won low net with a 63, one stroke better than John Sawicki's (Dept. 6) 64.

Third flight players were led by Paul Hood (Dept. 100) with 84, second low gross went to Pete Calta (Dept. 180) who shot a 91. Low net leaders with 62 and 66 were John Ulsund (Dept. 140) and E. Mukleviez (Dept. 115).

SD Car Clubbers Will Rehash Rally At Meeting Today

Color slides and discussion of the recent "Seat of the Pants" rally will highlight tonight's (March 1) meeting of Convair SD Sports Car Club at 7:30 p.m. in the Museum of Natural History, Balboa Park.

Non-club members who participated in the rally are extended a special invitation to attend the affair.

Convair class winners of the rally were B. G. Ward and P. Ward, a father-son team that finished with an error of 3 minutes, 41 seconds.

Ranked second were G. Coffey and C. Coffey; in third were Mr. and Mrs. Peter Aperlo; F. Slayton and E. Slayton placed fourth. An excellent turnout of 175 entries was totaled.

In recent outside competition, the driver-navigator team of Tommy Jackson and Peter Aperlo won the Atlas III Warm-up Rally conducted by Palomar Sports Car Club with an error of 21 seconds.

Volleyball League Starts March 15

Shop league volleyball for both Convair SD and Astronautics employees will begin March 15.

Teams will be accepted from both operating divisions and formed into leagues. At the close of the season, individual trophies will be awarded to league champions and to respective plant champions.

Team workouts are now being held in the Federal Building, Balboa Park, each Wednesday evening.

To enter a team for league play, or for additional information, contact Pete Beyrer, Plant 1, ext. 1245.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

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ASTRONOMY—Meeting March 3, 7:30 p.m., Gillespie Field Clubhouse.

BADMINTON—Annual tourney March 4-5, Federal Bldg., Balboa Park, starting at 10:30 a.m. To enter call Bill Johnstone, ext. 2995, Plant 1.

BOWLING—Entries taken to March 11 deadline for annual Convair Championship Tournament, March 25. Forms at Plants 1 and 2 employee services.

BRIDGE CLUB—Next session March 7, 7:30 p.m., Hotel Barcelona, 326 Juniper St.

CHORALAIRES — Rehearsals each Monday evening, 7:30 p.m., CRA Clubhouse, Pacific Hwy.

COIN CLUB — Joint meeting SD County coin clubs March 6, 8 p.m., Vasa Club, 3094 El Cajon Blvd.

GOLF—CRA sweeps March 4-5 at Circle R.

GUN CLUB — CRA "Silver Bird" shoot March 5, 9 a.m. till noon, Gillespie Field Range. Next meeting March 14, 7 p.m., Gillespie Field Clubhouse.

JUDO—Workouts and instruction every Thursday in CRA Clubhouse on Pacific Hwy., 6-7:30 p.m.

MODEL RAILROAD — "Timetable" operation of HO-gauge layout March 3, 7:30 p.m., House of Charm, Balboa Park.

MOVIES — Reduced-price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB — Next shoot March 12, San Diego Police Range, 9:30 a.m.

RADIO CLUB — Meeting tomorrow (March 2), 7:30 p.m. Harbor Drive headquarters.

RIDING CLUB — Meeting March 2, 7:30 p.m., Gillespie Field Clubhouse. Open Horse Show and Gymkhana March 5 starting at 9 a.m., Clover Leaf Arena, Mission Valley.

ROAD RUNNERS — Anniversary outing March 10-12 to Yaqui Pass Primitive Campgrounds. For information call Kay Perkins, JU-2-3291, or Ruth Peterson, HO-6-6582.

ROCKHOUNDS — Meeting March 9, 7:30 p.m., Gillespie Field Clubhouse.

SOLO FLYERS — Ground School classes start today (March 1) 6:30 p.m., Jim's Air Service, Lindbergh Field. Call Rex Robinson, ext. 2271, Plant 1.

SPORTS CAR CLUB—Meeting tonight (March 1), 7:30 p.m., Natural History Museum, Balboa Park.

SQUARE DANCE CLUB — Register now for new beginners class starting in April. For information call CRA office, ext. 1245, Plant 1, or Maury Scholz, ext. 2916, Plant 1. All-Convair square dance, Pomona, March 11.

SWIMMING — Free family swim night March 4, 7-9 p.m., Mission Beach Plunge. Tickets at employee services, Plants 1 and 2.

VOLLEYBALL — Convair shop league season opens March 15. Call Pete Beyrer, ext. 1245, Plant 1.

WOMEN'S ACTIVITIES — Registration open for advanced charm school to start March 22. Call Martha Woodberry, ext. 1245, Plant 1.

YMCA Memberships Offered at Discount

Convair persons have been invited to attend a special open house Friday (March 10) at the downtown YMCA, 8th and C Sts., between 7:30 and 11 p.m.

The open house is being held in conjunction with the YMCA's SO-ED (Social-Educational) program which is planned especially for adults 18 years of age and over. Convair SD Recreation Association is offering memberships in this program at the reduced price of $4 per year.

CRA Riders, Square Dancers To Pool Talents on March 5

Members of two CRA groups, Riding Club and Hoedowners, will pool their talents to stage a colorful Saturday show of entertainment March 5 at the Clover Leaf arena in Mission Valley.

The equestrian group will present its second open horse show and gymkhana of 1961 starting at 9 a.m. and the Hoedowners will stage a square dancing exhibition during the noon intermission.

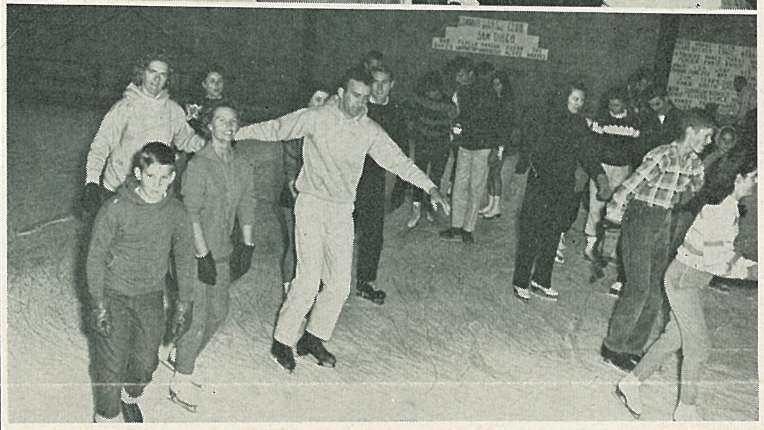
Fun show entries are expected to top the January total of 200 and afford plenty of entertainment for spectators who are invited to attend without charge. Coffee and sandwiches will be sold at the chuckwagon.

According to V. V. Thomason, president of the Riding Club, the March 5 spectacle will be the last big event scheduled by the club until the August point show.

Members and others interested are reminded that the next club meeting will be tomorrow (March 2) at 7:30 p.m. at the Gillespie Field Clubhouse.

A member of the International Arabian Horse Association will screen a color-and-sound film which includes scenes of cutting and roping exhibitions, trail rides, parades, stock horse and show ring work.





SKATERS WALTZ—Convair SD-Astro Ice Skating Club trip to Big Bear Feb. 17-19 almost set new attendance mark with more than 100 skaters participating. In top photo part of group enjoys Saturday dinner in Wawona Lodge; below Convair skaters fill Iceland Rink at Big Bear. Photos by J. P. Perrington (Dept. 271).

Ice Skating Trip Big Success As 102 Attend Big Bear Outing

One of the largest crowds ever to attend a Convair ice skating function took part in the trip to Big Bear sponsored jointly by the Astro and Convair SD Ice Skating Clubs Feb. 17-19.

Final count stood at 102 enthusiasts who completely filled accommodations arranged for them at Wawona Lodge and spilled over into adjacent cabins.

Weekend activities included skating at Big Bear rink in which 75 persons participated, skiing on "manufactured" snow at Rebel Ridge, a Saturday night dance for adults at Snow Summit Inn, and a special party for teen-agers at Wawona Lodge.

Meals were prepared and served by volunteers, using food supplies brought from San Diego. Eating in three shifts, it took about an hour and a half to serve one meal.

All activities for the event were coordinated by Martha Woodberry, Bud Davies, and Gil Hutter, all CRA commissioners.

Badminton Tourney Deadline March 3

Two more days remain for SD and Astro employees to enter the fourth annual Convair badminton tournament slated for the Federal Building, Balboa Park, beginning at 10:30 a.m., March 4.

Astro registrations will be accepted through March 3 by Elaine, ext. 1111, or Les Marr, Astro CRA commissioner, ext. 1780. Convair SD entrants may sign up with Bill Johnstone, Plant 1, ext. 2995.

Play in the novice division will be scheduled if sufficient applications are received.

Astro employees on second and third shifts may now take part in badminton activities with the scheduling of play periods in the Federal Building from 10 a.m. to 1 p.m., Wednesdays.

Information on the Astro night shift program is available from Casey Milner, ext. 680 (second shift).

Toastmasters Set Schedule

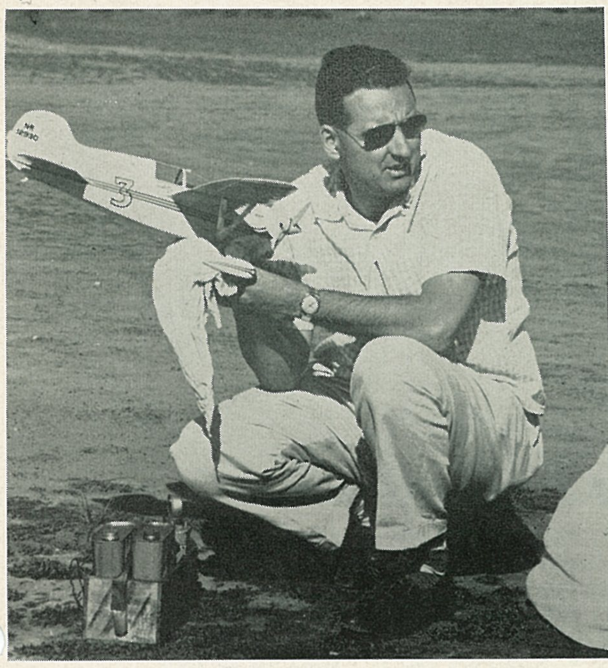
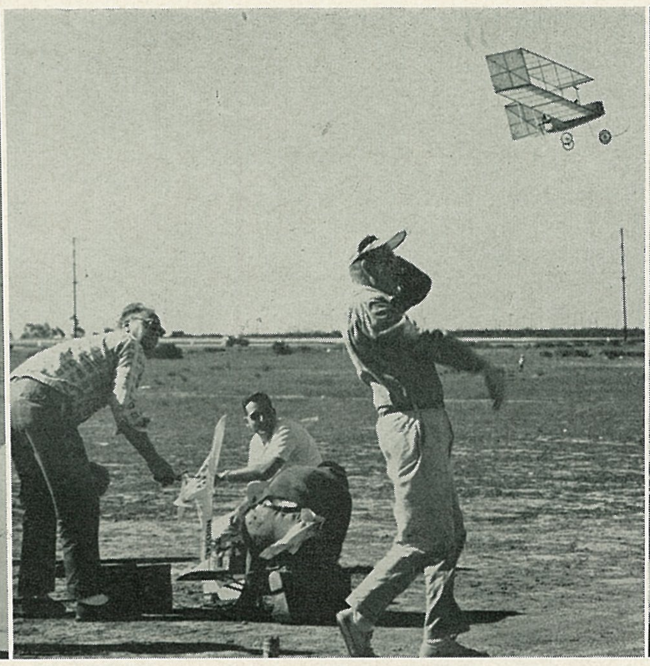
Two special affairs are in the offing for Convair Toastmasters Club #457 with guest nights scheduled for March 4 and 13.

Top speakers will vie in the annual speech contest, arranged as a "Ladies' Night" dinner meeting, this Saturday at Town and Country Hotel. Social hour is set for 7 p.m., followed by a 7:30 p.m. dinner.

Speaker to represent the Convair group in the district contest will be chosen on results of the club competition. Chosen speakers will be handed topics an hour before their turn at the lectern. Talks will be from five to seven minutes in length.

Reservations for the $3.50 dinner may be made by calling Don Quinn, ext. 1264, or Andrew Gormish, ext. 2273, both SD Plant 1.

Delta Toastmasters will join Convair Toastmasters at a combined dinner meeting Monday (March 13) in the executive dining room of the Convair cafeteria, Pacific Hwy. Dinner will be served at 6 p.m. Guests of both clubs are invited.


MIGHTY MODELS—Free-flight scale contest conducted by Convair SD Aeromodelers Feb. 18-19 attracted 15 entries. At left is Dan Lutz, first place winner, with his Art Chester "Jeep" model; in center Harold Osborne goes through gyrations as he launched his "Dunne Tailless"; judges in third photo are (from left) Bob Shields, Walter Mooney and John Hunter. Contest attracted 12 entries from out of town who battled sharp breezes in putting models through paces.

Williamson Scores 'Double' To Lead SD Pistol Shooters

Joe Williamson (Dept. 401-5) was a two-time winner at Feb. 12 matches of the Convair SD Pistol Club, sweeping both the master class of the .22-caliber police course and the short national match course.

Shutting out three other top SD sharpshooters by one point, Williamson topped the master class with a score of 287. Eleven "Xs" for Carl Hornburg (Dept. 139) put him in second; Jim Halfacre (Dept. 180) and Ash Bishop (Dept. 400-2) tied for third with eight "Xs." All three had scores of 286.

In the expert class W. G. Walker (Dept. 6) was on top with 284 points and E. E. Bickar (Dept. 215) second with 280.

Dorcus Utter (wife of Arley Utter, Dept. 129) stepped up to take honors in the sharpshooter class with 270 points. Harvey Ingalls (Dept. 6) was second with 246.

Keeping it all in the family, Arley Utter took the marksman class with 234. L. L. Richeson, also Dept. 129, was next with 231.

Trailing Williamson in the center-fire short national were Bickar, second; Halfacre, third; and Hornburg, fourth.

Plans Formed For Beginners Square Class

If enough interest develops Convair SD Hoedowners will start a new square dance beginners class the first week in April.

Starting with basic steps and progressing to more advanced patterns the beginners course will last approximately 30 weeks.

Lists of prospective students are now being compiled. Convair employees and family members interested are asked to contact either employee services, ext. 1245, Plant 1; or Maury Scholz, ext. 2916, Plant 1.

Scholz, who is CRA commissioner of square dancing, said a number of Hoedowners will be making the trek to Pomona next weekend for the March 11 all-Convair dance. Those making the trip will qualify for the novel "Knothead" badge which is given members who travel at least 100 miles to a dance and return within 24 hours.

In other Hoedowners news, Scholz said the intermediate class was slated for graduation last night. He also said the Hoedowners would help host the state square dancing convention which will be held in San Diego in the spring.

Silver Techniques Topic at Meeting

Rockhounds at Convair SD will learn the intricacies of working with silver at their March 9 meeting at the Gillespie Field Clubhouse, 7:30 p.m.

Mrs. Donna Rutkowski, assistant director of the Naval Hobby Shop and expert in different types of hobby work, will explain silver techniques.

Thirty-five SD rockhound enthusiasts trekked to Wiley Well for the Feb. 18-19 rock hunt and campout with plenty of fun, food, and good collecting highlighting the weekend.

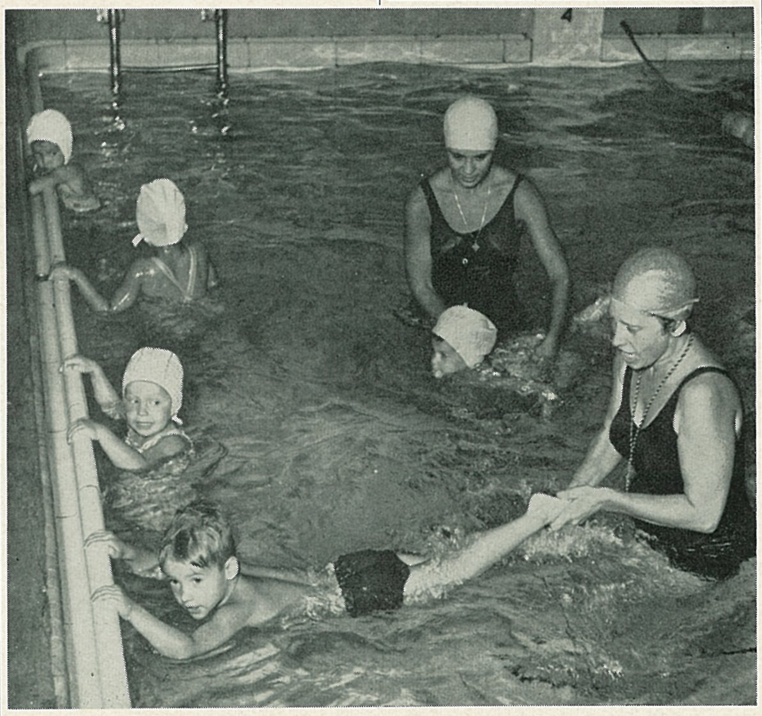
Swim Lessons For Children Now at YMCA

Special swim instruction programs for "Tiny Tots" and "Small Fry" are being offered children of Convair parents at the downtown YMCA, 8th and C Sts., according to Pete Beyrer of SD employee services.

The first program is for boys and girls between 3 and 6 years of age. Half-hour lessons are given school day mornings between 9 and 11. Total course cost is $8 for eight lessons and each class is limited to eight children with one instructor on hand for every four students.

According to Beyrer, the same price prevails for the "Small Fry" swim instruction. Sessions are held for children between 6 and 8 years of age on Saturday mornings 8:30 to 9 a.m.

Convair parents can make instruction reservations for their children by calling the YMCA, BE-2-7451. Openings presently exist for "Tiny Tot" instruction starting the week of March 9; next "Small Fry" class starts March 4.



SWIM SCHOOL—Convair sons and daughters, ages 3 to 6 and 6 to 8, have been invited to take swim classes such as above at the downtown YMCA, 8th and C Sts. "Tiny Tot" classes are held weekdays; "Small Fry" sessions are scheduled Saturdays.

CRA Sports & Recreation Convairiety

Advanced Charm Course Reduced Price Offered

An advanced charm school course for Convair San Diego women who wish to continue their self-improvement program will start this month, announced Martha Woodberry, CRA commissioner of women's activities.

The course, due to begin March 22, is open to all Convair SD women employees, wives, and daughters who have already completed the basic charm classes.

Cost of the advanced course is $15 per person, payable upon registration. (CRA underwrites the greater share of the charm school courses.) The six-week course will be held each Wednesday evening, 7-9 p.m., in executive dining room of the new Convair cafeteria on Pacific Hwy. Instructor is Edith Antelline, charm school director, who has conducted courses for Convair women the last five years.

Mrs. Antelline will give individual attention to each student's particular problems. Personal instruction will be given each woman in figure correction, posture, walking, modeling technique, make-up, hair styling, voice improvement, business and social etiquette, and apparel.

As the course is limited to 25 persons, Mrs. Woodberry urges all interested women to sign up as soon as possible at Plant 1 employee services or call CRA office, ext. 1245, Plant 1.

Nine Coin Groups To Meet March 6

Convair SD Coin Club will stage exhibits at a joint meeting of nine San Diego County numismatic clubs on March 6.

Visitors are invited to attend the session which will be held at 8 p.m. at Vasa Club, 3094 El Cajon Blvd.

March Trip Marks First Anniversary For Road Runners

Bringing back memories of just a year ago—and their first outing—Convair San Diego Road Runners will revisit the site of their first camp at Yaqui Pass Primitive Campground over the weekend of March 10-12.

The camping site where the trailer group will gather round the campfire for their anniversary get-together is two miles from Tamarisk Grove Campground. Kay Perkins at JU-2-3291 or Ruth Peterson, HO-6-6582, will explain location and route details.

Members will reminisce on highlights of their other trips during the last year including their jaunt to Idylwild County Park last September, the big gathering at Del Mar TTCA Border Rally in October, and the trek to Joshua Tree National Monument the first of this year.

Eleven trailers and 34 people made camp over the Feb. 17-19 weekend in the Fish Creek-Split Mountain area 10 miles south of Ocotillo Wells on the group's second trip there. They felt right at home with two other Convair clubs, Rockhounds from Pomona and Astro Travelers, camping in the same area during the weekend.

Gun Club Slates Shoot on Sunday

The joint Astronautics-Convair SD CRA Gun Club will hold a "silver bird" shoot at its next meeting March 5 at Gillespie Field.

During the trap shooting event, one silver bird will be thrown for each squad competing. If the silver bird is broken, the shooter will receive his choice of a number of prizes.

Competition for prizes will be conducted from 9 a.m. until noon, and will include a variety of events for rifle shooters as well as shotgun marksmen.

Next club business meeting is slated for 7 p.m., March 14, at the Convair Clubhouse, Gillespie Field.

LA Man Wins Aeromodelers Scale Contest

Fifteen entries in most kinds of contests is usually a rather sad total but when a free-flight scale contest attracts a field of 15 it is news.

In fact it put the Convair SD Aeromodelers' meet held Feb. 18-19 on the same level numerically as the 1960 national contest staged in Dallas.

Twelve of the entries at the Convair contest were from out of town, the majority from the Los Angeles area, according to Gary Witt, contest director, and Walter Mooney, meet coordinator.

Windy weather hampered the flying session Sunday morning but the competitors made many nice flights, said Mooney.

Winner was Dan Lutz of Los Angeles with a model of Art Chester's "Jeep" racer; Dale Miller was second with a World War I biplane, "BEZE"; Howard Bordon placed third with his Curtiss Robin; John Moody's SE5A ranked fourth.

In other contest categories: junior class winner was Chris Smith's Cessna 170 model; Miller's "BEZE" took the best World War I fighter award; Lutz, the meet champion, also won the best light plane award with his Tri-Traveler model.

Three Dept. 6 men, members of the Institute of Aeronautical Sciences historical committee, judged models on Saturday. They were Bob Shields, John Hunter and Mooney.

Star Party Set For Astronomers

A star-gazing party will be held this Friday night (March 3) when Convair SD astronomers host a meeting of the San Diego Youth Astronomy Club at Gillespie Field Clubhouse.

Keith Sears, CRA commissioner, said that a full evening has been planned for the "Star Party," with movies, refreshments, and casing the stars on the program. Only a short business session will be held.

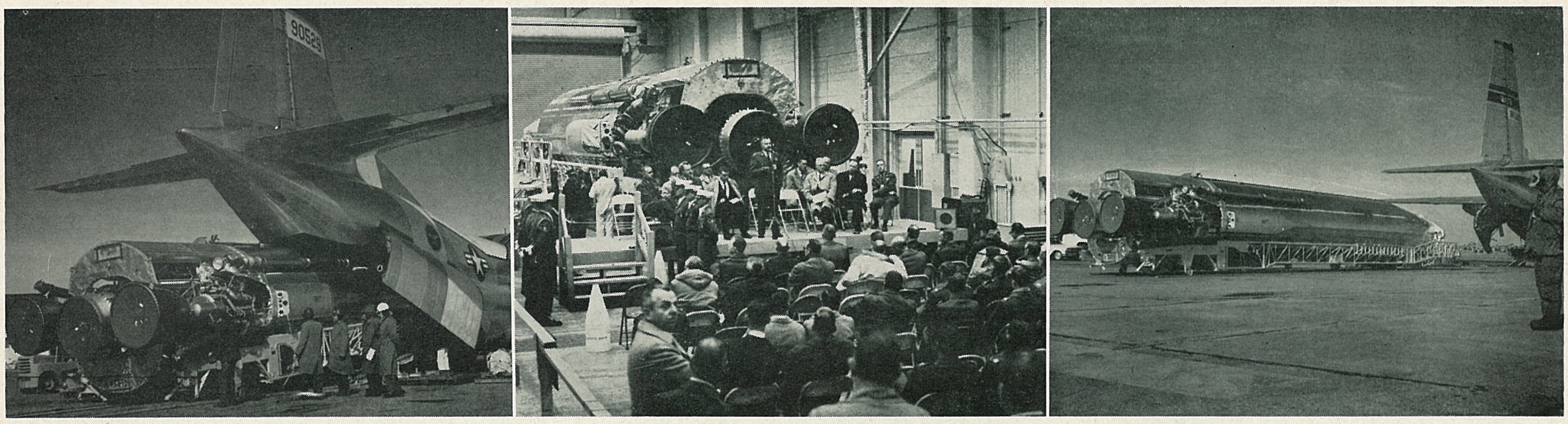
All members are urged to bring their families and friends to the 7:30 p.m. affair.

Railroaders Elect Worthington Prexy

Bill Worthington of Astro Dept. 120-5 will head the Convair CRA Model Railroad Club for the coming club term following recent election of officers.

Assisting will be Dave Fyffe (Astro Dept. 591-5) as general manager; Wayne Harris (SD-Dept. 31), treasurer; and R. Cuttell, secretary.

Model railroaders from both SD and Astro meet weekly for work-play sessions each Friday night, 7:30 p.m., in the House of Charm, Balboa Park. Anyone interested is invited to attend.



AN EVEN ZERO—Welcome was warm but weather was chilly (an even zero degrees) when first Atlas missile arrived at Forbes AFB near Topeka, Kan. At left missile is coaxed down rails as overcoated Astro men watch. At right, note guard in cold weather gear. Center, inside at last, Atlas is formally welcomed. Among speakers was Lt. Gov. Harold Chase of Kansas. Other civic and government leaders and AF officials participated in ceremony.

Tape Gives Commands To 'Machining Center'

A complete "machining center" which turns out Atlas missile parts automatically according to instructions fed into it on punched tape is now in operation in Convair Astronautics machine shop.

The "brainy" device, a Kearney and Trecker Milwaukee-Matic Model 2, selects and uses any of 31 tools in any sequence from a tool storage magazine, and when a part is completed moves another into position to start work anew.

Tapes for the machine, like those for two Burgmaster numerically controlled turret drills previously installed (**Convairiety,** Nov. 23), are punched as a series of holes in eight-channel one-inch wide plastic tape on a Flexowriter.

Taped signals command the machine's operation as the information is fed through a General Electric numerical positioning control system. The new machine has two tape readers operating alternately, so when one job is completed the second tape is started to shift another part into work position.

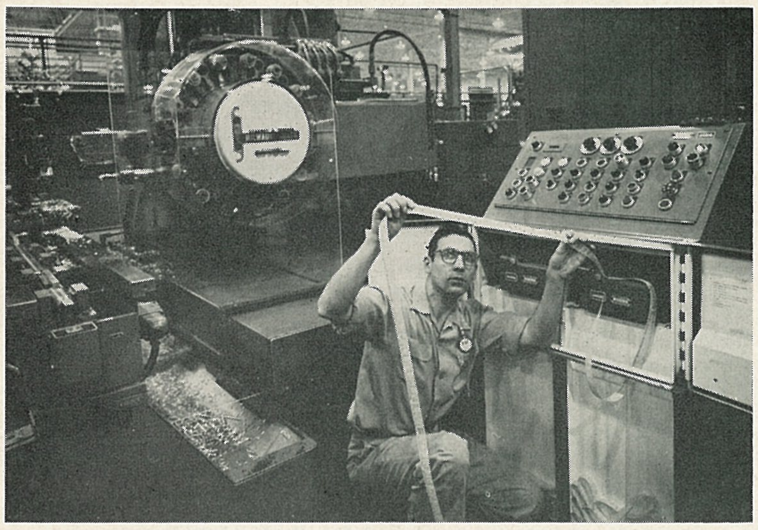
Coded tools (961 of them) may be used in the machine for any combination of milling, drilling, tapping, reaming, boring or counterboring operations.

Acquired with the Milwaukee-Matic is an optical tool setter used to precision-set tools before they are installed in the machine's magazine. Tools are set to .0001-inch tolerances, while the machine itself has no more than .0005-inch positioning error and repeats to plus-or-minus .0003-inch tolerances.

"This extreme accuracy provides greater uniformity in parts produced," explains W. T. Herchold, machine shop general foreman.

Presently the Milwaukee-Matic is used to produce detail parts such as missile transponder housings.

Herchold, Frank Unmack of applied manufacturing research and process development (Dept. 290), and Leo Kegans of facilities requirements (Dept. 182), developed machine specifications and qualified acceptance for Astronautics.



LABOR SAVER—Operator W. E. Ladd examines perforated tape regulating operation of Milwaukee-Matic Model 2 numerically controlled "machine center" at rear.

Few Copies of 'Goals' On Sale at Discount

Special paperback editions of "Goals for Americans" continue on sale at discount prices at employee services in each of Convair's operating divisions.

For 75 cents (instead of regular $1 price) Convair persons can read a complete report of "President's Commission on National Goals" as well as a series of essays on vital national subjects written by recognized authorities.

"Goals for Americans" has received high recommendation by Frank Pace Jr., board chairman of General Dynamics Corporation and vice chairman of commission.

Admiral to Speak To Naval Reserve

Vice Adm. Roy A. Gano will speak to members of Naval Reserve Military Sea Transportation Service Division at 8 p.m., Feb. 27 at Republic Bank Auditorium, Dallas.

Convair reservists who will be guests at the function include: Lcdr. D. L. B. Combs, Dept. 11-3; Lcdr. W. T. Hogue, Dept. 6-1; Lt. E. L. Heerwald, Dept. 7-3; Lt. V. V. Hajek, Dept. 22-2; and Cdr. C. M. Schmidt, Dept. 6-6.

Schmidt, who commands NR-MSTS Co. 80-1, says openings in the Fort Worth unit now exist.

FW Air-Conditioning History Related

An article by Frank Clayton, chief plant engineer, will be featured in March issue of "Air Engineering," trade journal for air conditioning and allied fields.

Entitled "Eighteen Years After—an Air-Conditioning Case History," the article deals with the history and updating of Convair's air system.

According to Clayton, Convair FW's air-conditioned system was the largest of its type in the country when installed 18 years ago.

Zero Weather Greets First Atlas at Forbes

FORBES AFB—Arrival of the first Atlas missile at this Kansas base was the occasion for a welcome ceremony involving civic and government officials.

Lt. Gov. Harold Chase was among the speakers and said "Kansas is indeed proud to take a leading part in this country's defense.

"However, I hope we never hear the thunderous roar of this missile in world conflict," he added.

It was zero-degree weather, with a 25-mile wind blowing when the Atlas arrived by airlift. Unloading crews worked in shifts and security personnel stood guard in 20-minute sessions.

Rex Ubben, Convair operations manager here, joined with other officials at welcoming ceremonies inside Forbes' Missile Assembly Building. On hand were Topeka Mayor Ed Camp, Col. James Flanagan, Forbes commanding officer; Col. Gerald M. Clugston, 548th Strategic Missile Squadron commander; Hon. Fred Asay, chairman of the military affairs committee; J. H. Abrahams, Chamber of Commerce president, and Police Chief Dale Wells.

Management Action Course in Progress

About 40 supervisors from modernization departments are attending a 15-hour course in "Management Action," at Convair FW.

Instructors for the classes, which run from 4 to 5:30 p.m. Mondays and Thursdays, are modernization general foremen: J. O. Muncy, O. I. Jones, M. C. Smith and L. C. King.

General subjects include: "Methods That Get Results"; "Getting Results From People"; "Getting Results From Yourself as a Leader"; and "Building Men —Key to 'Results.'"

J. B. Seaberry, modernization superintendent, and C. E. Nevitt of educational services will moderate the concluding group discussion.

'Design Stage' Idea Clips $5,000 Off Cost of Atom Plane Tests

Two Convair FW engineers were literally "on the beam" with a value assurance suggestion which pared $5,000 from nuclear airplane test costs.

Original plans called for construction of a special test fixture from which a 13-foot-long forward portion model of NX-2 could be clamped for dynamic calibration.

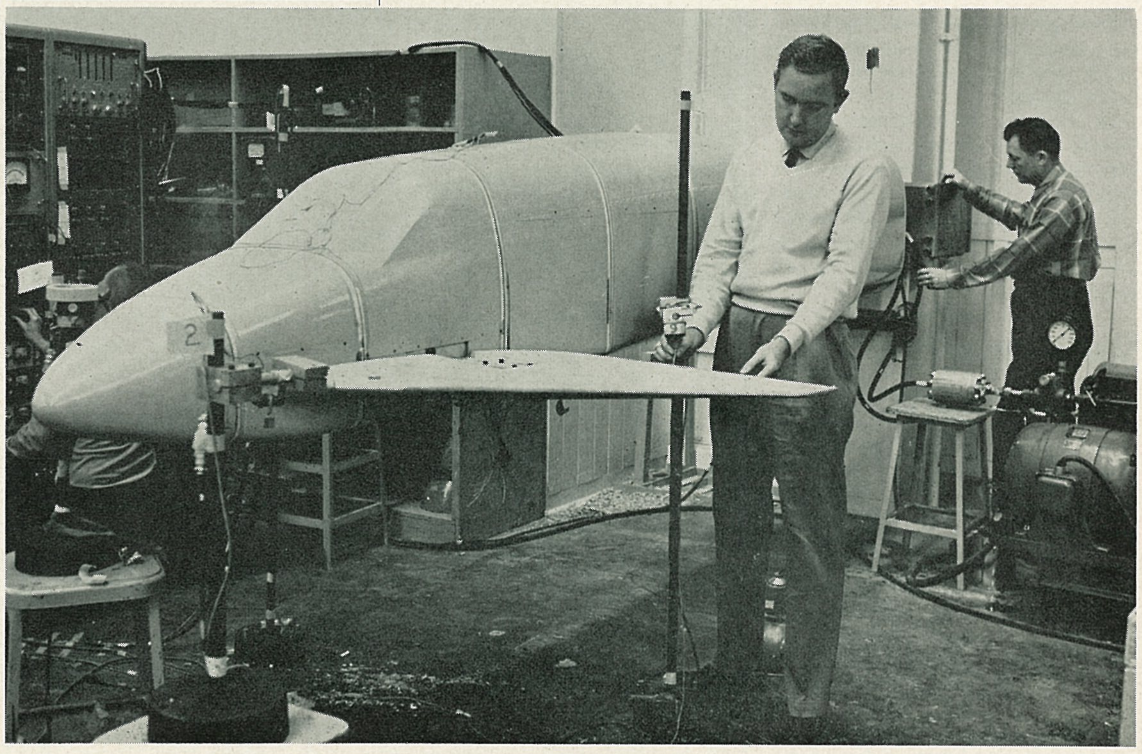
Instead, R. A. Smith of aerodynamic testing and J. C. Elrod of structural dynamics suggested the NX-2 model be clamped to a building support column — Col. 85-N.

The 1,700-pound model is now securely in place and a hydraulic pump is inducing necessary "natural frequencies" needed for calibration.

The model must withstand these tests before going into full-fledged wind tunnel tests at NASA Langley Research Center. Tests will be used later to demonstrate fuselage and canard freedom from flutter — and to establish dynamic stability parameters of the canards (short "wings" near the front of the fuselage).

Bill McMurry, value control training coordinator, lauded the suggestion as an excellent example of "value assurance."

"This is the term given to cost-saving suggestions made in the design stage of a product — and of course, this is the point where the greatest long-range savings can be made in a program," he said.



ON BEAM—J. C. Elrod, foreground, and R. A. Smith, right, check out NX-2 fuselage model attached to Col. 85-N for calibration testing. Engineers conceived money-saving idea.

G. E. Employees Donate Blood In Convair Man's Emergency

Jack Donaldson, assistant manager-commercial sales in G. O. at SD is convalescing at home following successful open heart surgery Jan. 4 in Philadelphia.



J. D. Donaldson

After entering the Philadelphia hospital Donaldson learned that a heart-lung machine would be necessary to take over the job of circulating blood while the surgeons were operating and that between 15 and 20 pints of whole blood supplied by donors only a few hours beforehand would be needed.

Far from home and in a comparatively strange city, Donaldson appealed to his friend John Ivers of Long Island, N. Y., sales representative for General Electric's Flight Propulsion Division. They had become acquainted some years before in connection with supplying GE-CJ-805 jet engines for Convair 880s. Ivers acted at once, appealing to General Electric Missile and Space Vehicle Department in Philadelphia which asked employees for A-positive donors. The response was prompt and Ginny Hausmann, General Electric employee benefits clerk, informed Donaldson not to worry, that there were 18 donors standing by, including herself.

The operation was entirely successful and Donaldson, at age 52, was the oldest person to undergo this particular type of surgery at Presbyterian Hospital.

Generosity of General Electric employees did not go long unrecognized. At San Diego, members of G. O. sales, and SD flight test, trooped to the Blood Bank to make replacement, credited to General Electric employees' account in Philadelphia.

Donaldson's recovery was complicated by an infection that developed after surgery.

GENERAL DYNAMICS

Convairiety

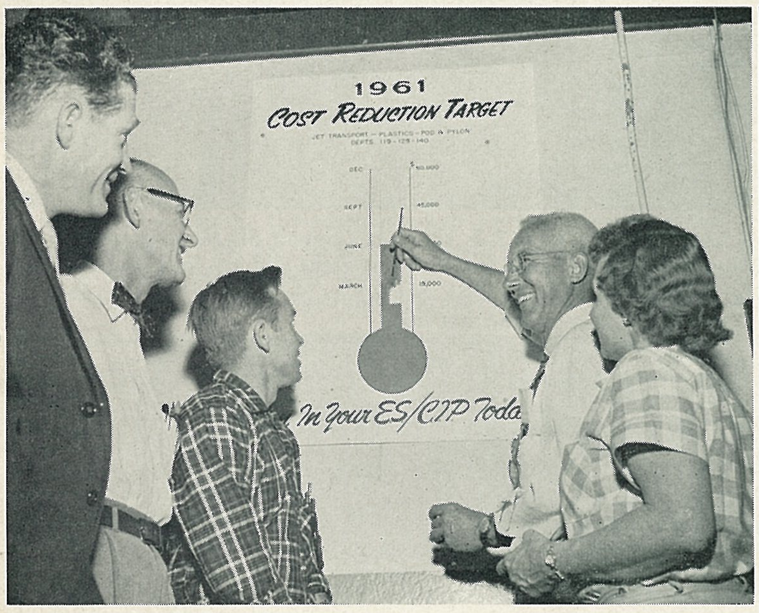
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SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. — ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.



FAST START—Departments 129, 119 and 140 have already reached halfway point in race toward their 1961 cost reduction total target of $60,000. Bringing thermometer up to date are (from left): M. F. Link (Dept. 119), C. M. Craig (Dept. 129), L. H. Harris (Dept. 129), Harold Hahn of cost reduction group, and Greta Phillips (Dept. 129).

Dept. 119 Already Over Cost Reduction Goal

Metal bond fabrication and assembly (Dept. 119) is the first Convair SD department to match and exceed its 1961 cost reduction dollar target.

In only two months it has piled up savings of $16,247 which is 162 per cent of its 1961 total goal of $10,000.

All direct and indirect departments are involved in the contest, each has been given a target to match by the end of the year. Each person can help by submitting either Employee Suggestions (for hourly personnel) or Cost Improvement Proposals (for flat salaried people).

As of the end of February, direct departments have posted savings of $77,317 as compared to their total annual goal of $1,-050,000.

Statistics during the first two months of 1961 show indirect departments with a savings total of $40,142, compared to a target of $1,450,000.

Individual department targets range from minimums of $10,000 to a maximum of $200,000, which is the goal of engineering, Dept. 6. The program has been established so that each department will know exactly what it is expected to contribute toward the reduction of operating costs.

Twelve large poster thermometers, each grouping certain departments, have been located throughout SD Plants 1 and 2 and Rose Canyon. They show the progress of direct departments as compared to their goals.

Industrial relations (Dept. 3) is leading the way among the indirect departments with savings of $17,260, considerably more than half of its total goal of $25,000. Other indirect departments in order of dollar savings are Depts. 44, 192, 328, 4, 25, 401, 91, 6.

Direct departments trailing the leader, Dept. 119, in order of dollar savings are Dept. 146 (39 per cent of goal), 129 (38 per cent of goal), 31, 117 (78 per cent of goal), 140, 148, 313, 266, 102 and 136.

DYNAPAK, PROJECT X NOW IN NEW DEPT.

A new department, Advanced Products Department, was formed last month by General Dynamics Corporation to include Convair operations involved in research and production for commercial sale of revolutionary new items.

Dynapak and Project X, both located in San Diego, have been transferred to the new department. Convair Instruments, also formerly in Convair special products, has been shifted to the newly-formed General Dynamics/Electronics division.

R. G. Monsees, manager of Convair special products since fall of 1959, has been appointed manager, Advanced Products Department, reporting to John F. Mitchell, manager, New Products Development, of General Dynamics. Monsees is located in the Dynapak office building at Midway Drive and Fordham St., SD.

Replacing Monsees as Convair manager of licensing and senior attorney is William Duerksen. He reports to R. B. Watts, Convair vice president and general counsel.

Rhoades MacBride Assumes Convair Division Control

Direct executive authority over Convair operations passed smoothly late last month to C. Rhoades MacBride following resignation of J. V. Naish, Convair president since 1958.

MacBride is executive vice president-operations for General Dynamics Corporation and as such is responsible for operations of all Dynamics divisions, their respective presidents reporting to him.

Currently MacBride also is acting president of Convair and is centering his base of operations in San Diego.

MacBride's association with Convair dates back to 1951 when he represented a management consulting firm (Robert Heller & Associates) in analyzing Consolidated Vultee operations. More recently his association with Convair has been through General Dynamics which he joined in January, 1958, as vice president-operations.

After taking command, MacBride lost no time in making his association with Convair and Convair personnel even more intimate. He addressed a meeting of supervision at Astronautics Feb. 28; toured the Convair SD factory in close detail March 3, talking directly with crews on the line; met with local press and TV in San Diego for an hour March 6; and the same day appeared before a meeting of SD supervision that packed the new cafeteria building.

MacBride addressed supervision at Pomona last Thursday (March 9) and will appear in Fort Worth March 30 to make the annual President's Award at the Management Club meeting.

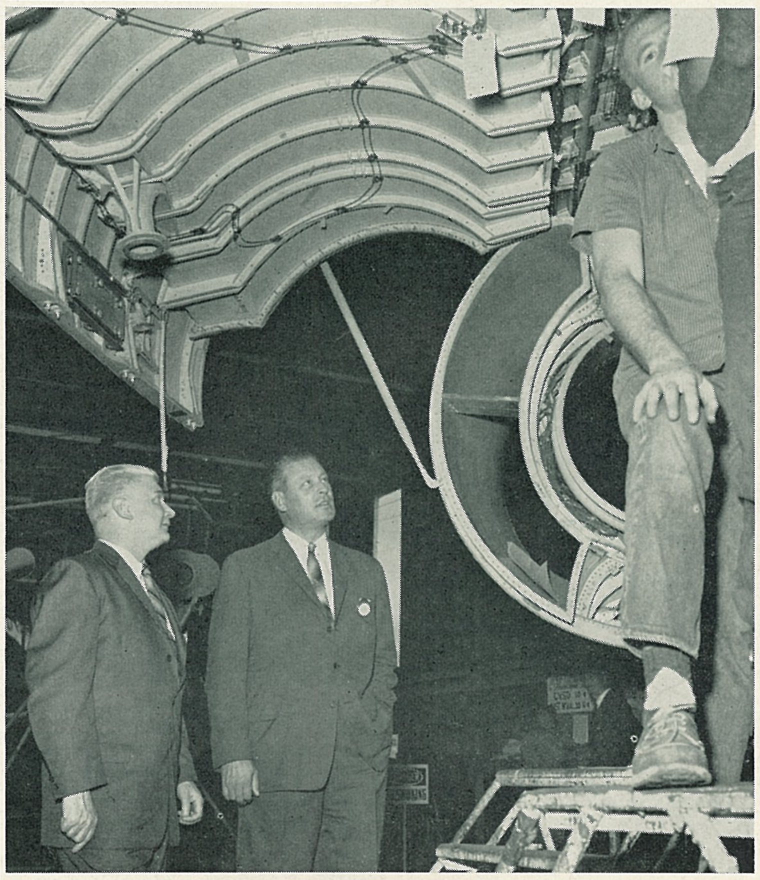
On all occasions he repeated assurances that no drastic changes in management personnel are contemplated, though pointing out that any healthy corporation is continuously evolving, reacting to changing conditions.

At the press conference MacBride was careful to explain by chart the executive authority within General Dynamics, starting with Frank Pace Jr., board chairman and chief executive officer, flowing to Earl D. Johnson, Dynamics president, and thence to himself and to W. P. Gullander, executive vice president-finance and administration. The latter also attended the press conference.

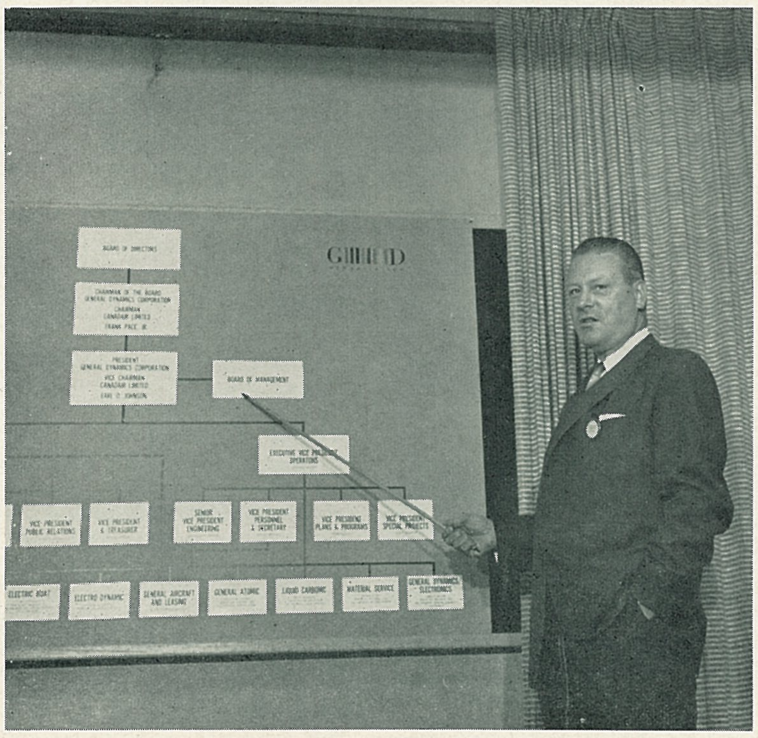
Competence of Convair personnel "all the way up and down the ladder" drew MacBride's comments at all appearances. He repeated that in his considerable experience he had never before seen such an aggregate of competence and talent.

In the matter of appraising companies MacBride speaks with considerable authority. During his years with Heller & Associates he analyzed the operations of some two dozen major concerns "from the inside." One of his longest tours of duty was in San Diego from 1951 to 1953, at first

(Continued on Page 8)



IN THE SHOP—"Red" McLaughlin, factory manager at SD, is no small man, but C. Rhoades MacBride (right, 6 ft. 4½ in., 240 lbs.) is a bit bigger. Photo was taken on line at SD where MacBride made intensive tour, talked with personnel, inquired into manufacturing processes.



CHAIN OF COMMAND—C. Rhoades MacBride, during SD press conference, used chart to illustrate executive responsibility within General Dynamics.

'Pick Your Men, Back Them Up!'

C. Rhoades MacBride believes in "management by exception" wherein a top executive concerns himself with the problem areas, not the details of the total picture.

"It is my firm personal philosophy that you've got to pick men in whom you have confidence and back them to the hilt, in their mistakes as well as their successes. When they make mistakes help them. If their mistakes reach an unacceptable level, fire them."

He also believes that supervisors all down the line have to accept two-way responsibility—to worry about corrective action upward as well as downward. "I want people working in a climate where they feel an obligation to speak up and say to me, 'I think you're wrong about this.'"

Contracts and Customer Service Position Goes to George Buchner



Geo. Buchner



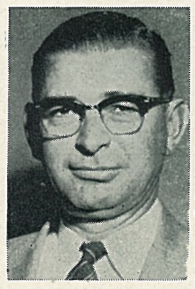
Ira Sykes

Changes in organization at Convair San Diego are reflected in the appointment of new managers by R. C. Loomis, Convair vice president and SD manager.

George Buchner, formerly of Astronautics operating division, has assumed duties in the newly-formed post as manager of contracts and customer service.

Ira D. Sykes Jr., former program planning administrator at Convair Pomona, has transferred to Convair San Diego as manager of long range planning. Sykes replaces J. W. Dixon, now on leave of absence to accept a federal government appointment at Washington, D.C.

A. E. Andress was named manager of systems and procedures and data processing, replacing D. L. Johnson who has resigned as manager of systems and procedures for another position. The systems and procedures department has been transferred to the controller's organization under D. C. Burrows, controller.



A. E. Andress

(Continued on Page 2)

SD Club's Members To Dance Saturday

Les Brown will bring his band of renown to the newly-decorated main ballroom of Hotel del Coronado this Saturday (March 18) for the Convair San Diego Management Club "Spring Dance."

Dress will be informal for the whirl which will start at 9 p.m. Additional features of the evening will be raffle prizes and a special door prize bonus: a weekend trip for two to Las Vegas by air.

Tickets for the dance, which is sponsored by tooling department, are priced at $5 per couple. They are now on sale at club outlets.

Log Book Entries

Promotions

SAN DIEGO

Promotions to or within supervision effective Feb. 27.

Dept. 2-2, Division Manager's Office: To assistant division manager-operations, J. H. Famme. To night manager, F. E. Grossher.

Dept. 3-7, Industrial Relations: To educational services supervisor, D. S. Clark.

Dept. 7, Electronics: To senior electronics projects engineer, H. Stern. To manufacturing services general supervisor, H. E. Robinson. To electronics projects engineer, W. S. Dickey. To assistant electronics group engineer, J. V. Wahl. To assistant foreman, G. G. Bair.

Dept. 14-7, Traffic & Material Stores: To assistant foreman, J. Comba.

Dept. 15, Customer Service: To manager of customer service, O. W. Harper. To chief of interceptor service, R. E. Sommers. To field service supervisor, W. W. Fenton. To service engineering supervisor, S. B. Stevens.

Dept. 31, Experimental: To general foreman, O. C. Banke, N. R. Keough. To assistant general foreman, B. A. Clemmens.

Dept. 100, Factory Manager's Office: To factory manager, F. H. McLaughlin. To assistant factory manager, S. J. Barinka, A. B. McFarland, W. D. Reed, E. D. Robinson. To superintendent, L. F. Boring, L. R. House, N. P. Pearson.

Dept. 101, Sheet Metal: To general foreman, G. K. Cox.

Dept. 115, Machine Shop: To general foreman, F. I. Garrison. To assistant general foreman, G. D. Carroll.

Dept. 116, Electric Bench: To general foreman, W. M. Holland.

Dept. 119, Metal Bond Fabrication & Assembly: To assistant general foreman, M. F. Link. To assistant foreman, M. S. Gianformaggion.

Dept. 120, Jet Transport Bench Subassembly: To general foreman, J. R. Benedict.

Dept. 129, Plastics & Trim: To general foreman, L. W. Stamper.

Dept. 133, Jet Transport Door Assembly: To assistant general foreman, G. H. Wilson.

Dept. 137, Jet Transport Aft Fuselage Structure, Overwing Barrel, Lower Aft Canoe, Aft Tail: To general foreman, B. T. McMicken.

Dept. 138, Jet Transport Forward Fuselage Primary: To general foreman, J. S. Bryant. To assistant general foreman, W. S. Nader.

Dept. 140, Pod & Pylon Assembly: To general foreman, C. W. Clark. To assistant foreman, M. F. Castro.

Dept. 141-1, Jet Transport Delivery Preparation: To general foreman, J. F. Good. To assistant foreman, J. P. Kircher, R. E. Knauer.

Dept. 145, Jet Transport Wing Structure: To general foreman, J. P. Strachan.

Dept. 146, Jet Transport Wing Primary & Wing Mate: To general foreman, J. F. Ames.

Dept. 148, Jet Transport Major Mate: To assistant general foreman, D. E. Palumbo.

Dept. 160, Jet Transport Final Assembly: To general foreman. C. F. Uhl.

Dept. 170, Electronics Installation: To assistant general foreman, F. S. Pyatt.

Dept. 171, Field Operations: To general foreman, F. F. Stevens.

Dept. 188, Inspection, Plant 1: To inspection assistant supervisor, G. R. Clapshaw, L. E. Cupp, G. M. Graham, J. C. Marries Jr.

Dept. 192, Manufacturing Control, Plant 1: To M/C foreman, C. B. Hill. To M/C assistant foreman, B. R. Miale.

Dept. 215, Machine Shop: To general foreman, R. L. Williams. To assistant general foreman, V. N. Logan. To assistant foreman, J. Popp.

Dept. 223, Welding: To general foreman, B. L. Wolfe.

Service Emblems

SAN DIEGO

Service emblems due during period March 1 through March 15.

Thirty-year: Dept. 1-71, C. R. Irvine; Dept. 145, J. P. Strachan.

Twenty-five-year: Dept. 100, A. R. Johnson; Dept. 141, J. F. Good; Dept. 190, J. S. Bryant; Dept. 218, R. O. Funke.

Twenty-year: Dept. 3-1, D. M. Zaiser; Dept. 6, M. W. Montgomery (due 2-9-61), W. G. Pesek, R. L. Weaver; Dept. 15-5, R. T. Haas Jr.; Dept. 34-2, Martin Formanek; Dept. 123-0, C. E. Haynes; Dept. 138, O. G. Bauman; Dept. 188-5, J. G. Sugg; Dept. 201, D. C. Gale.

Fifteen-year: Dept. 6-35, C. E. Chapman; Dept. 15-5, C. H. Clements; Dept. 25-9, L. B. Buhrman; Dept. 31, A. L. Brunner; Dept. 140, Monte Prince; Dept. 171, J. B. Smither; Dept. 249, Edna A. Lee; Dept. 266-0, H. A. Lovelady.

Ten-year: Dept. 1-23, Mary F. Caetano; Dept. 3, W. H. Goggin, Dorothy B. Graham, H. C. Weaver, P. F. Veal; Dept. 6, Verna K. Baumgartner, E. A. Brook Jr., J. B. Herreshoff, T. J. Patris, J. A. Turner; Dept. 7, R. H. Bacon, Alice W. Lawrence, W. K. Orr, Clara B. Reynolds.

Dept. 8-4, J. S. Dodds; Dept. 14, S. J. Bucaro, Marian H. Champlin, Amelia R. Stogsdill, Nellie B. Tucker; Dept. 15, J. A. Fulton, G. B. Miller, Gayle W. Vance; Dept. 25, Traville Doucette Jr., Robert Johnson, Roberta S. Kelly, W. R. La Bounty, R. L. Leib; Dept. 31, J. L. Brown, R. C. Calderon, F. H. Gross (due 3-10-59).

Dept. 44-1, McIrwin Swinney; Dept. 91-8, Marjorie C. Sulzberger; Dept. 97-7, Norma L. Gooley; Dept. 101, W. G. Castro; Dept. 102, Speros Lamprou, F. U. Ugale; Dept. 109, V. G. Aubain; Dept. 110, W. H. Bock; Dept. 116, Georgina S. Collins.

Dept. 117, Irene E. McKay, Ethel S. Popham; Dept. 129, Catherine B. Pappas; Dept. 133, C. L. Cupp, J. M. G. Puente; Dept. 135, R. W. Clausen, Jesus Hernandez; Dept. 137, R. V. Delgadillo, R. W. Garoutte; Dept. 139, Joe Aguiar Jr.; Dept. 140, C. L. Lopez, Ola M. Wagner, Lila W. Williams.

Dept. 141, Mirian B. Armstrong; Dept. 142, E. L. Krowl; Dept. 144, R. G. Castro; Dept. 145, C. D. Zachary; Dept. 148, E. L. Collins, Carl Peterson; Dept. 160, W. F. Green; Dept. 188, L. E. Cupp, M. C. Hallmark, W. M. Hendrickson, J. J. O'Brien, Joseph Sima.

Dept. 192, G. K. Croucher, Catherine M. Holcombe, Elva M. Mooney, Dorothy H. Mott, Edward Richmond, Maria F. Riddle, Elsie H. Robbins; Dept. 204, J. M. Macias, Joseph Sosa; Dept. 205, Carmen S. Collins; Dept. 215, V. D. Baillif, Ethel B. Kelly; Dept. 216, Lorene W. Emeterio, Alberta W. Michaelsen, Jean B. Tarnowski; Dept. 218, Ethel H. Collins, Cora S. Ellis, Beverly J. Southwick, Verna M. Taylor.

Dept. 271, R. C. Barrett, P. C. Garcia, Jodie H. O'Neal; Dept. 280, Susan B. Craiger; Dept. 288, W. J. Becker, W. A. Folsom Jr., Ruby S. Franco, Margaret G. O'Neill; Dept. 400, Thelma I. Gordon, Lois G. Starling, June N. Wallace; Dept. 401, O. R. Baker, Roy Guiterrez, H. C. Korn, F. T. Tacata; Dept. 406, L. P. Goggin.

HOLLOMAN AFB

Ten-year: Dept. 313-0, F. E. Roeder Jr.

PALMDALE

Ten-year: Dept. 321-1, J. W. Bennett; Dept. 324-4, H. G. Hagoort (due 11-3-60); Dept. 328-1, E. F. Vaughn.

Retirements

SAN DIEGO

ANDERSON—Andy O., Dept. 14-7. Seniority date Feb. 16, 1959, retirement effective Feb. 24, 1961.

BROLLINI—Venanzio, Dept. 25-2. Seniority date Feb. 23, 1956, retirement effective March 1, 1961.

GRANT—Gilbert F., Dept. 14-8. Seniority date May 1, 1950, retirement effective Feb. 24, 1961.

LEECH—Seth Jr., Dept. 148. Seniority date June 30, 1950, retirement effective Feb. 28, 1961.

MAKER—Clifford N., Dept. 188-1. Seniority date Feb. 9, 1953, retirement effective Feb. 17, 1961.

SHAFFER—Harold C., Dept. 401-4. Seniority date Feb. 10, 1956, retirement effective Feb. 17, 1961.

STROWGER—Arthur G., Dept. 6-21. Seniority date March 3, 1952, retirement effective Feb. 24, 1961.

WILLIS—Dale E., Dept. 232. Seniority date Oct. 22, 1951, retirement effective March 1, 1961.

WINKLER—Frank C., Dept. 123. Seniority date Jan. 23, 1952, retirement effective Feb. 24, 1961.

Personals

SAN DIEGO

We wish to thank all of our Convair friends for the many kindnesses shown us during the illness and death of our father, Roy Bourcy, Dept. 171.

June E. Edney.
Jerome L. Bourcy.

* * *

We wish to express our sincere appreciation to all of our Convair San Diego friends for the many kindnesses, flowers, and messages of sympathy received at the death of our husband and father, Leo Bourdon.

Mrs. Leo Bourdon.
Bernard Bourdon, Dept. 292.

* * *

Your kind expressions of sympathy are gratefully acknowledged and deeply appreciated.

Mrs. Jack Livesay and Family.

* * *

I wish to express my sincere thanks to all my friends at Convair San Diego and Astronautics for the flowers, cards, and contributions received following the loss of my husband, Thaine Bell.

Olivia M. Bell and Family,
Astro Dept. 781.

Births

SAN DIEGO

LANGSFORD—Daughter, Sharon Lee, 8 lbs., 2½ oz., born Feb. 15 to Mr. and Mrs. Guy L. Langsford, Dept. 7.

PRECIADO—Daughter, Ruth, 4 lbs., 8 oz., born Feb. 26 to Mr. and Mrs. Benjamin Preciado, Dept. 137.

ROSS—Son, Steven Michael, 7 lbs., born Feb. 19 to Mr. and Mrs. Harry M. Ross, Dept. 400. Mother, June Ross, on leave from Dept. 6.

RUSCIGNO—Son, John Joseph, 9 lbs., 9½ oz., born March 4 to Mr. and Mrs. Harry Ruscigno, Dept. 6.

Deaths

SAN DIEGO

SEPIN—Art S., Dept. 188. Died March 2. Survivors include his wife, Viola C.; four daughters, Bonnie, Jeanine, Nancy, Mrs. Evelyn Isom; two sons, Arthur L. and Lauren S.; two grandchildren; five sisters and one brother.

60 Square Dancers Make Pomona Trip

Sixty enthusiastic members of both Convair SD and Astronautics CRA Square Dance Clubs were the guests of their counterpart organization at Convair Pomona Saturday (March 11).

★ Convairiety ★

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Approximate current total circulation, over 70,000. News items and letters to the editor are solicited, but no advertising can be accepted.

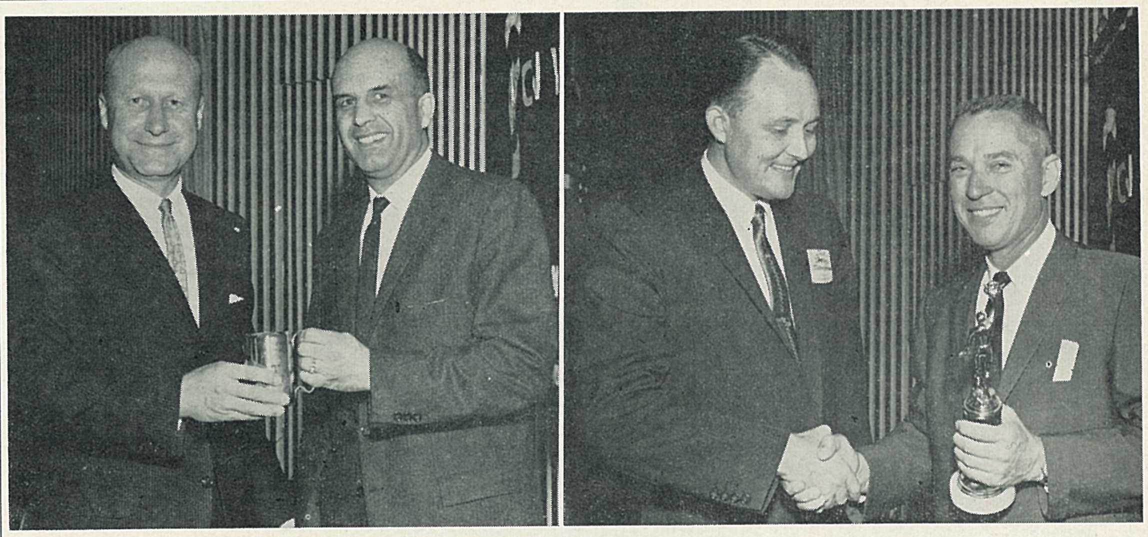
SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Fred Bettinger, news editor; Grayce Fath, Helen Pemberton.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.



LEADERS—In photo at left Keith Sears (right), Dept. 3-2, receives Convair SD Management Club's Mug of Month award from Jack Swank at Feb. 15 club meeting. In right photo, Jack Ireland (left) presents January MacSave-it trophy to Paul Veal (Dept. 3-8). Sears was recognized for contributions to Management Club; Veal's award was for cost reduction activities.

SD Suggestor Batting .500

Convair SD's M. R. Brown (Dept. 141) is hitting an even .500 in the cost reduction world. He has submitted no less than 48 Employee Suggestions in the past 14 months of which exactly 24 were approved.

In the process Brown has saved the company $10,320 and earned for himself over $1,000 in award money.

In addition Brown is the first hourly man to qualify for the ES cuff link and tie clasp set "bonus" for cumulative savings of over $10,000.

Most of Brown's suggestions have been concerned with redesign improvements of Convair jet transport air conditioning systems.



IDEA MAN — M. R. Brown (Dept. 141) "submits" handful of Employee Suggestions. In 14 months Brown has submitted 48 ESs, had 24 approved.

Typical was his idea to secure an air conditioning duct with four nut plates instead of the 40 previously used.

"My basic motivation in submitting Employee Suggestions is to make my own job easier," said Brown, who in the course of his job must do a certain amount of work in cramped quarters.

Brown's smallest ES payment was for $5, his largest check totaled $251. But persistence is the catchword for Brown who was in Dept. 146 until recently transferred to Dept. 141.

Brown earned the cuff link and tie clasp set under the "bonus" arrangement for savings totaled from a period retroactive to Jan. 1, 1960.

Russian Language Course Proposed

A lunch-time Russian language class may be formed at Convair San Diego if enough people are interested.

Educational services will arrange for facilities and an instructor at a place convenient to the majority of the group if enough prospective students signify their interest by calling ext. 1548, Plant 1.

The classroom could be located in Bldgs. 19, 14, or 32, said Dale Walton of SD educational services.

Contracts and Customer Service Position Goes to George Buchner

(Continued from Page 1)

Reporting to Buchner are C. G. Glasgow, named manager of contracts—military; F. S. Chambers, now manager of contracts—commercial; and O. W. Harper, manager of customer service. D. H. Digges, former manager of contracts, has transferred to General Office.

The following will report to Andress: J. J. Ireland, supervisor of systems engineering; J. T. Berthelet, supervisor of procedures; and G. O. Withem, who takes over as chief of data processing.

Buchner came to Astronautics last fall from Baker Aircraft Sales Inc., Long Beach, Calif., where he was vice president and general manager of the Northern Division. A veteran of more than 20 years in the aircraft industry, he had held responsible posts with Lockheed Aircraft Service, Inc., Curtiss-Wright Corp., Northrop Aircraft, Inc., and Cochran Aviation, Inc.

He was base activation manager for Astronautics before his new assignment.

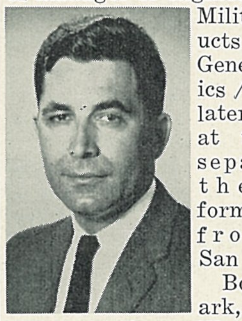
Sykes, a native of Houston, Texas, joined Convair at Pomona in February, 1956, as a long range scheduler. He was named program planning administrator early in 1960. He had served with the U.S. Navy from 1940 to 1953, holding the rank of commander upon his discharge. After that he spent two years as project engineer with Bendix Aviation Inc., Mishawaka, Ind., before coming to Convair.

Andress, who has been with Convair San Diego since 1936, had been chief of data processing since 1957, and before that, chief of tabulating.

★ ★ ★

In other appointments announced this month, Dr. Donald Wahl was named chief electronics engineer for SD, replacing E. C. Oertel, now on the staff of W. W. Fox, SD chief engineer.

Dr. Wahl will assume the title of manager of engineering for the Military Products Division of General Dynamics / Electronics later this month at the official separation of the newly-formed division from Convair San Diego.



D. Wahl

Born in Newark, N.J., Dr. Wahl received his B.S. and Ph.D. degrees in physics from M.I.T., Cambridge, Mass. Before joining the electronics department at Convair SD in June, 1960, he had been assistant to the president of EPSCO, Inc., Cambridge. Previously he had been connected with Avion Division of ACF Industries, Paramus, N.J., and Atomic Energy Division, Sylvania, Bayside, N.Y.

W. S. Stroud, manager of management services for SD electronics, has been appointed General Dynamics/Electronics representative for integration at Convair San Diego. In his new position Stroud will be contact point for all persons in SD operating division for policies concerning the formation of General Dynamics /Electronics, explained Loomis.

During the time he is responsible for the implementation of the new division, his normal duties will be assumed by F. L. Farrell.

★ ★ ★

R. E. Sommers is now chief of interceptor service at Convair SD, reporting to O. W. Harper, manager of customer service. Sommers has been acting in the capacity since late 1959. W. W. Fenton is named field service supervisor; and S. B. Stevens, service engineering supervisor.

R. H. Nall is now supervisor of management development in SD educational services and will be located in Bldg. 16, Plant 1.

Replacing Nall as supervisor of engineering, professional and technical development, is D. S. Clark, with offices in Bldg. 51.

SD Jeep Club Now Affiliated With Squadron

Convair SD Jeep Club is now affiliated with the San Diego County Search and Rescue Group, Squadron 97 of the Civil Air Patrol with headquarters on Billy Mitchell Drive, Gillespie Field, Santee.

The squadron absorbed the San Diego County Ridgerunners, previous Convair club parent organization.

Convair SD's Art Thomas, who is squadron commander, said persons interested in search and rescue work are invited to join the group.

A comprehensive training program will be conducted by the squadron which will meet the first and third Wednesday of the month at the Santee site. Included will be instruction and movies on first aid, map reading and vehicle maintenance.

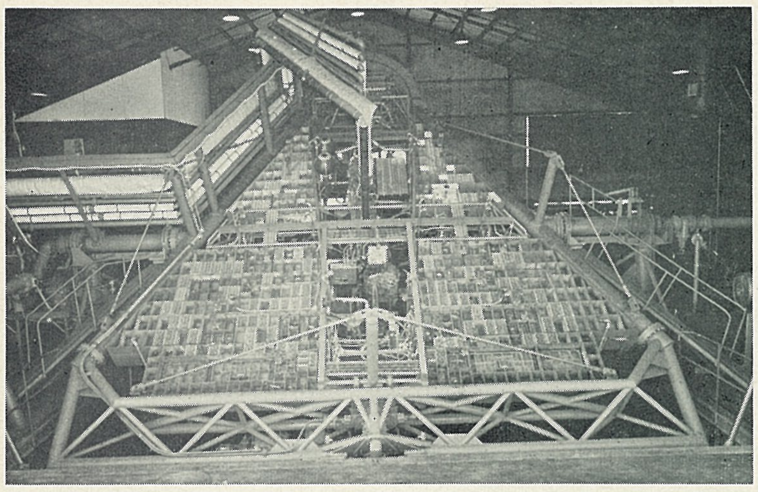
In addition to the rescue phase of the organization, monthly field trips will also be held by the group. For information, call Thomas, HI-8-1602.

Thomas said a good number of Convair jeepers are planning to attend the annual Hemet Cruise scheduled this weekend (March 18-19). Departure will be from the Hemet Fairgrounds Saturday morning at 7.

Two Convair Men Training Advisers

ANTELOPE VALLEY—Two Convair men, based at Palmdale facility, have been named to serve as advisers on a newly-formed Aeronautics Advisory Committee to determine needs of aeronautical training in Antelope Valley.

Roy Russell of Dept. 326, Convair engineer, and Chuck Meyers, F-106 test pilot, have been invited by Antelope Valley College officials to act in an advisory capacity to the group made up of state educators, local businessmen, aircraft company and military representatives. First meeting will be March 16.



CONTACT—This is full-scale mockup of F-106 fuel system in "climb" attitude. Photo shows test stand configuration prior to installation of refrigeration unit and without insulation, both of which are now incorporated on stand during fuel icing tests.

Full-Scale Mockup of Fuel System Used in F-106 Contamination Tests

What happens to an F-106 streaking through the sky if it is burning fuel mixed with dirt, lint, sand and water?

Convair engineers are seeking the answers these days as they conduct fuel icing tests at the Convair SD ramp.

They are adding solid contaminants to moisture-conditioned fuel and running the carefully-proportioned mixture through a full-scale mockup of the F-106 fuel system.

In addition to acquiring information on "dirty" fuel problems they are getting a better "fix" on the segments of the fuel system most prone to collect ice and slush, because the solid contaminants cause a greater build-up of ice formations.

The solid contaminant test is but one part of the fuel icing tests now under way, according to D. G. Clark, thermodynamics lab design specialist in charge of fuel system testing. He said fuel icing problems occur primarily in strainers and inlet screens of fuel pumps.

Almost any type of fuel management problem can be duplicated in the full-scale mockup of the F-106 fuel system.

For instance, in the "in-flight cooling test," the mockup is filled with water-saturated fuel. As technicians and engineers man the various controlling systems the mockup "takes off," "climbs out" to 40,000 feet and "levels off" in a subsonic cruise.

Fuel in the various tanks is cooled at different rates, corresponding with actual in-flight conditions of tank surface exposure and tank fuel quantities.

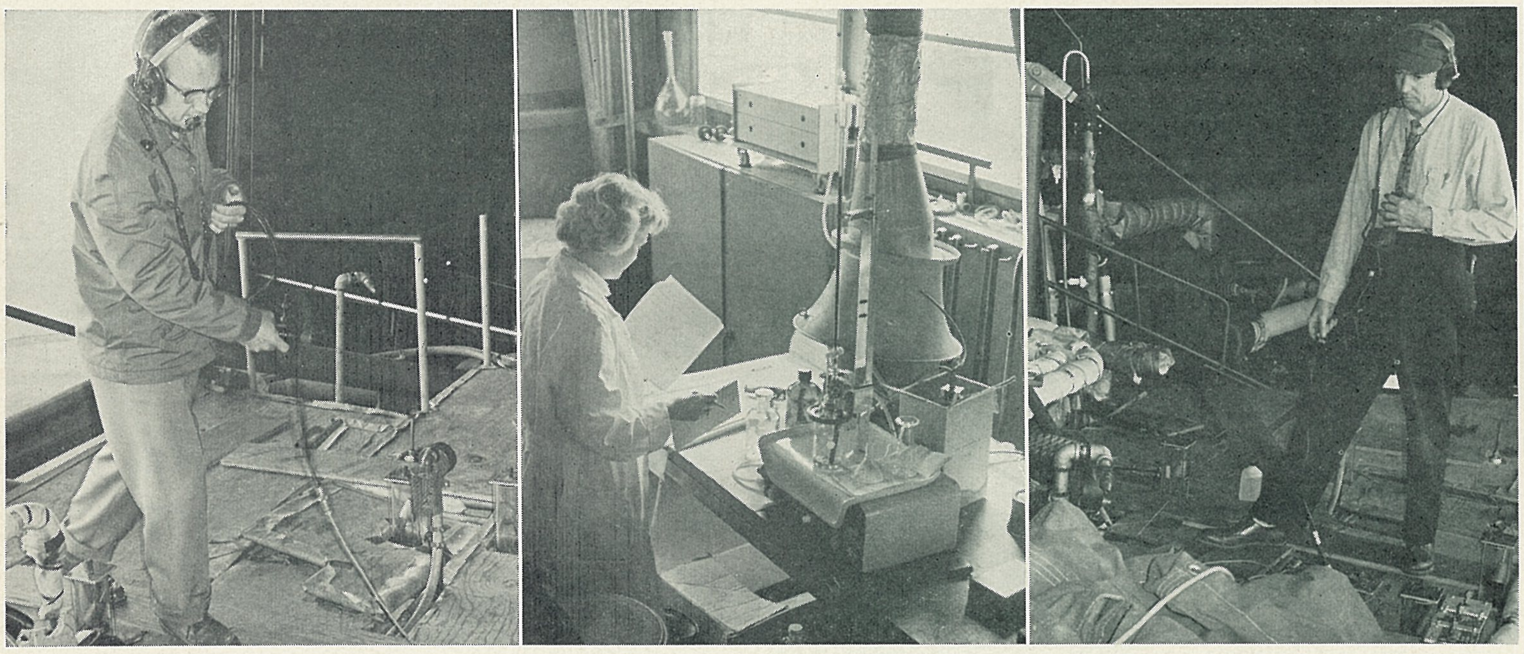
Other types of fuel icing tests simulate "ground cooling conditions." The mockup is filled with moisture-conditioned fuel at 40 degrees Fahrenheit. It then stays on the "ground" for eight hours while the fuel temperature is dropped to —40.

During "flight" (the same profile as in the "in-flight test") fuel temperature is kept between —35 and —40 degrees. After "landing," empty tanks are kept at below-freezing temperatures to allow ice to build up—not melt and relocate prior to the next refueling.

The mockup, which can also pitch and roll like an airplane in flight, has been in use since November of 1955. Fuel has been heated to an extreme of 165 degrees F. (as encountered by an F-106 flying supersonic when aerodynamic heating of the wing occurs).

In a certain sense, the mockup is the busiest "F-106" in the Air Force. In one week it has "burned up" as much as 130,000 gallons of fuel.

Playing important roles in the fuel system tests are two research engineers, J. R. Hilliard, in charge of test operations and specimen system, and D. P. Miller, who designs and operates special test equipment and environmental facilities. Leadman of the Dept. 31 technicians involved is Al Pushie.



TEST RUN—Convair SD's full-scale mockup of F-106 fuel system has been getting "dirty" treatment during past few weeks as engineers conduct solid contaminant and fuel icing tests. Manning stations on top wing during simulated F-106 flight are (left photo) Jack Weckerly, Dept. 6 test engineer, and (right photo) D. G. Clark, thermodynamics lab design specialist in charge of tests. In center photo Margaret Fahlstrom (Dept. 6-31) makes moisture analysis of fuel.

Record Setting Crew Wins Thompson Trophy

The Thompson Trophy—one of aviation's highest awards—was presented Feb. 28 to a record-breaking B-58 crew from Carswell's 43rd Bomb Wing.

Spot promotions followed two days later for Lt. Col. Harold E. Confer, pilot; Lt. Col. Richard H. Weir, navigator; and Major Howard S. Bialas, defensive systems operator—the crew which set a record of 1,284.73 mph over a 1,000-kilometer closed course.

Presenting the award in Washington was retired Air Force Gen. Benjamin Childlaw. He is board chairman of Thompson Ramo Wooldridge, which sponsors the trophy.

Childlaw said the Thompson Trophy winners' feat was symbolic of speed supremacy in the air.

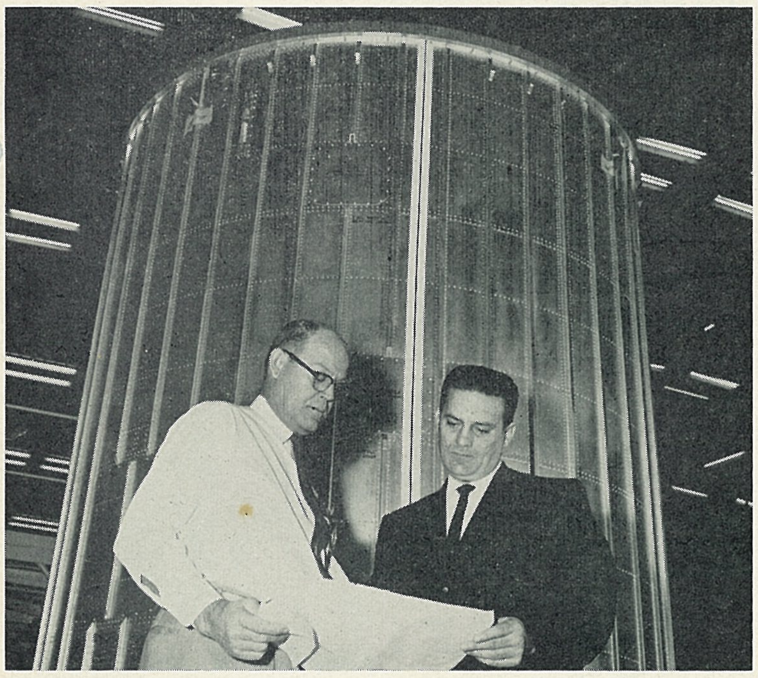
"It staggers the imagination to think that today you are flying 80-ton bombers at more than twice the speed of sound," Childlaw commented.

He said the feat is a tribute to the Convair men who conceived, designed and built the B-58 as well as to the men who flew it to the records.

Another B-58 piloted by Major Henry J. Deutschendorf Jr. flew the 2,000-kilometer course at 1,061 mph earlier to set a speed record in this category.

All told, the two Hustlers set six new world speed records, five of which were previously held by the Russians.

Col. James K. Johnson, 43rd Commander, lauded the "supreme efforts" of both crewmen and airplane in announcing the promotions of the Thompson Trophy winners.



"TALL CAN"—Among items Convair FW is manufacturing for Astronautics is "tall can" adapter which protects second-stage engines during Centaur launch. Ten feet in diameter and 12 feet tall, they are all aluminum, with light-gauge skins and stiffeners. In this photo first adapter made at FW is inspected by E. H. Callan, left, and M. L. Culver, who handle much of tooling and liaison on project.

Wallet Returned, Cards, $10 Intact

Donald R. Willey (Convair SD Dept. 145) lost his wallet when leaving the plant one afternoon and got it back when entering the plant the next morning.

After it dropped out of Willey's pocket, James H. Irving (also Dept. 145) picked it up, promptly turned it over to the gate guard.

When Willey applied for an identification card at the guard office next morning, he received his wallet back, still filled with one crisp $10 bill.

Flight Control Order Placed

A half-million-dollar contract has been awarded to Convair by Air Research and Development Command for design, development and testing of a pneumatic system for operating flight control surfaces of supersonic aircraft or missiles.

The work, to extend over a two-year period, will be performed at Convair San Diego. Amount of the contract is $566,126.

The contract calls for a high temperature, nuclear radiation resistant pneumatic system to withstand extreme heat and stress conditions encountered at high supersonic speeds. Such a system would replace present hydraulic systems.

K. E. Binns and B. P. Brooks of Flight Accessories Laboratory at Wright Air Development Division will direct the program. Convair project engineer at SD is Howard Wright.

Technical Writers President Speaker

Dr. Vernon Root, national president of the Society of Technical Writers and Publishers, and a staff member at Johns Hopkins University, addressed the Fort Worth chapter recently.

C. W. Thelen of Dept. 6-5 is executive chairman of the local group, and introduced Dr. Root. More than 100 members attended a dinner in the president's honor.

Giant 'Pressure Cooker' To Shape Plastic Parts

Most recent addition to Convair Astronautics' Kearny Mesa plant is a huge "pressure cooker" installed just outside the northwest corner of Bldg. 27.

Properly known as an "autoclave," the unit will be used to process phenolic (plastic) laminated production and tooling parts by Astro's plaster, plastic and foundry tooling (Dept. 454-0).

Phenolic laminates consist of several layers of phenolic impregnated cloth, bonded together by heat and pressure to form strong, firm shapes.

A familiar example of this substance is the thin, translucent board on which electronic circuits are printed. In a more complicated application laminates are shaped to complex curves and facings forming Atlas vernier engine pod fairings.

Before the autoclave was installed, forms swathed with layers of the phenolic material were placed in plastic bags in which vacuums were induced. The vacuum pressed the bag down to force the laminate firmly around the form during final "curing" in an oven.

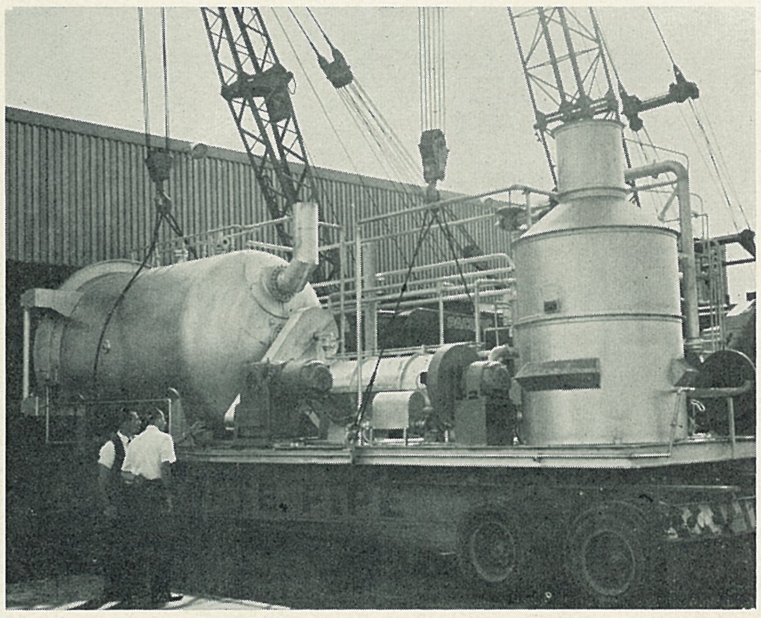
The vacuum bag method shapes parts under pressures of about 14 pounds per square inch and is adequate for most work. The autoclave, however, provides up to 300 pounds per square inch to handle more demanding projects.

"Because of the high pressures available, we can now shape strong, high-density laminates on intricate forms with a precision not previously possible," explained J. R. Evans, tooling foreman.

Working space in the autoclave is a drum 12 feet long and eight feet in diameter, closed by a tight fitting door.

Associated equipment includes a gas-fueled heat source creating temperatures up to 750° F., and a self-contained air compressor to build up pressures in the drum.

Jon Treat and Richard Christopher, assistant foremen, will supervise autoclave operation.



SUPER COOKER—Heavy crane lifts giant autoclave from trailer which delivered it to Astronautics plant before installation outside Bldg. 27. Work chamber in which phenolic laminates will be cured at high temperatures under pressure is at left.



CLUB BOSS—Fred Magruder (right), president of National Management Association, is shown here meeting R. H. Biron, Convair vice president-administration. Magruder also met with Convair SD Management Club officers as he went on whirlwind tour of San Diego area company clubs one day this month.

Spanish Lessons by Telephone Conceived by Convair Linguist

A Convair San Diego man, for the past two years instructor of CRA-sponsored Spanish classes, has conceived and launched a new way to teach Spanish—via the telephone.

The project, which he has conducted as a small business in his spare time, emphasizes actual use of the language by combining a daily written lesson with a telephone instructor (on records) who repeats phrases in perfectly-pronounced Spanish.



PHONE LESSON—J. M. Hardison (SD Dept. 15), originator of Tele-Spanish, a new concept in language education, passes guide book to Phyllis Roper (SD Dept. 15) as she listens to instructor on phone.

The education innovation is the offspring of J. M. Hardison (SD Dept. 15).

"The program is devised to fit into the fast pace of modern living, and is aimed especially at those who do not have the time to take regular classes, but still desire a working knowledge of the language," says Hardison.

In addition to teaching CRA-sponsored Spanish classes, Hardison is an instructor for the San Diego City adult education program.

"Tele-Spanish (trade name for Hardison's system) is actually a result of my teaching experience and the years I spent studying in Mexico City," said Hardison.

"I felt that by combining the proven practice of sight, sound and use of the language in some simple fashion a specific educational need would be filled."

During the past two months the system has been given two test runs to gauge reaction of students as well as to ascertain the number of telephone circuits required.

"Our test results have been encouraging and if interest continues to mount more courses will be offered to take the student from the beginners classification to intermediate and advanced status," said the Convair man.

The first course concentrates on giving the beginning student a working knowledge of about 100 basic Spanish expressions upon which the student can expand and gain in proficiency.

Under present arrangements one copyrighted guide book as well as an unlisted telephone number is sent to the person who signs for the course. As many as four members of a family are allowed to share one guide book.

Through CRA arrangement employee services at both Convair SD and Astro are offering a special price of $8 for the next course which starts April 1.

To enroll, students should mail the application form and signed lease agreement to Tele-Spanish, P.O. Box 4065, San Diego, Calif.

Convair Men Serve Estimating Society

Five Convair men hold offices for the 1961 term of the Industrial Estimating Society of San Diego.

Lee Boggess, Astro chief of estimating is vice president; Lew Grant (SD-Dept. 95-0), is treasurer; Wayne Zook, also Dept. 95-0 at Convair SD, is director of programs; Monroe Jones, Convair estimating administrator, is director of education; Roy Ashe, Convair director of estimating, is policy director. Dick Maving of SD estimating is an associate director of the Newsletter staff.

Meetings are held the first Tuesday of each month for all engaged or interested in the field of industrial estimating.

Coffee Mugs Are Membership Symbols In Club Recognizing 'Skeleton Force'

FAIRCHILD AFB—A skull-shaped coffee mug and a letter from W. F. Chana, Convair operations manager here, are membership tokens in the "Fairchild Skeleton Club" for a select group of Convair executives.

As corporate officers and Astronautics staff members visit here to inspect, review and assist with the progress of Atlas missile installations, Chana presents each with symbols of membership.

"The skeleton mug in your possession represents the small, or skeleton force, which directs the destiny of the many dedicated General Dynamics Corporation employees, and symbolizes your interest in Convair operations at Fairchild AFB," the accompanying letter reads.

Nineteen mugs once lined the shelves of a trophy case in Chana's office. Now only seven remain, awaiting visits of prospective Skeleton Club members.

200 Specimens

Indian Relics In Collection

When B. M. Caldwell, FW Dept. 65 electrician goes hunting, he's not after game, but Indian relics.

Caldwell, whose relics have been called "rare" by many museum experts, has been collecting them since his boyhood in the country north of Greenville, along the South Sulphur River. His current specimens number about 200, and include arrowheads with "engravings." One depicts an Indian chief, in full headdress. On another is scratched the head of a buffalo. Other "engravings" include a bird, and a crude map.

His collection includes a war club, a heavy round rock through which a hole was somehow bored, an early-day "billy club" and bits of pottery, some with fingerprints embedded in the clay. Another flint piece evidently was used as a hoe.



RELICS COLLECTOR — Experts have called B. M. Caldwell's collection of Indian relics "rare." Caldwell, FW Dept. 65 electrician, has been collecting since boyhood.

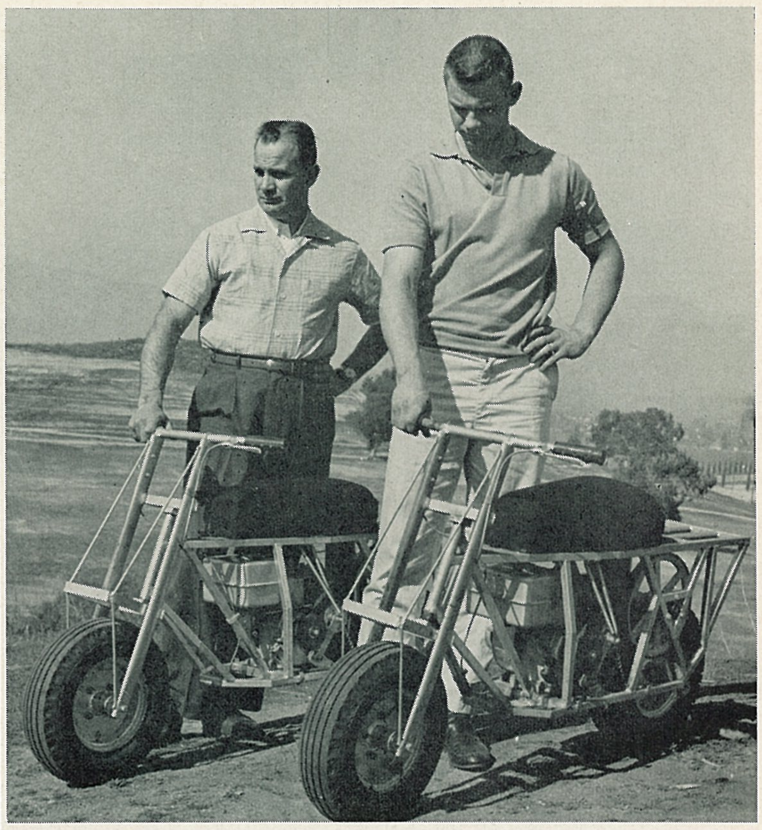
Nine Atlas Complexes Opened to Visitors

FAIRCHILD AFB—More than 2,700 employees of Convair, subcontractors, and associate contractors, SATAF and the 576th Strategic Missile Squadron and their families visited the nine Atlas launch complexes here during an Open House March 5.

Despite snowfalls each complex attracted visitors during the afternoon.

At complex "C," 800 persons attended; at "B," 450; "F," 300; "E," 290; "G," 243; "A," 225; "D," 185; "I," 147, and "H," 125.

Employees familiar with launch complex areas served as guides for their own families.



BURRITOS—Convair Pomona's W. V. "Bill" Nittler and his son, David, 19, demonstrate "Burritos," powerful motor scooters they built for "packing in and out" on hunting and camping trips in rough terrain. Construction took a month of spare time as "father and son" project.

Machine Age

Homemade Scooters Perform In Back Country Like Burros

Penetrating the back country for a camping trip, or packing out a deer over a game trail will present no obstacles in future for Convair Pomona's Bill Nittler and his 19-year-old son, David.

The Nittlers have built themselves powerful lightweight motor scooters, which are proving ideal for such purposes.

Powered by three-horsepower gasoline engines, the scooters are geared down to travel slowly, but surely, over any kind of terrain. And they are exceptionally maneuverable.

"We can go almost anywhere that game can go," Nittler said.

Nittler, who is CRA commissioner for the Rod and Gun Club, said that he had been thinking about building one of the scooters for about three years, and that he and his son decided to on a joint project around last Christmas. It took a month of weekends and evenings to complete the machines.

"We call them 'burritos'—little burros—and they have lived up to their names," he said.

Although several different, but similar, scooters are available commercially, Nittler decided that he and his son could build two for the price of one commercial unit. It worked out just about that way. The ready-made scooters retail for between $275 and $350. The Nittlers spent exactly $167 each on their homemade ones.

"More important than the savings, though, is the fact that we had a lot of fun building them," Nittler said.

Exhibition

Show Features Western Art

A Convair FW artist's one-man show of Western paintings in the Monahans Sands State Park Museum in Monahans, Texas, is drawing attention.

The artist is J. W. Gilbert, engineering illustrations editor in Dept. 6-5 the past 12 years. His other works include about 30 original covers for "Fort Worth," the monthly Chamber of Commerce magazine.

The Monahans Museum exhibition includes 25 watercolors, three oils and two pen and ink drawings. The show opened Feb. 26.

Explains Gilbert:

"Most of my work deals with the early life of Texas and the Southwest—the things people may have forgotten, yet which played such an important part in the development of this great state: cowboys, ranch life, old houses, fences, tools."

Gilbert studied in Howard Payne College in Brownwood, Young's School of Art, and with noted local artists, Emily Guthrie Smith and McKie Trotter.



ARTIST AND WORK — J. W. Gilbert, FW engineering illustrations editor, has executed approximately 30 cover paintings for monthly Chamber of Commerce magazine.

Explorer Scouts Slate Expedition in Sierras

Convair SD Air Explorer Squadron 340 will sponsor a two-week hiking expedition into the Sierra Mts. this year with departure date tentatively scheduled for Aug. 4.

H. L. Shaulis, chairman of the SD Management Club scout committee, said the hike will replace the river trip which has been the highlight of squadron activities in years past.

Interested Convair SD and Astro boys in high school (minimum age is 14½) are invited to make the mountain trek but should participate in the training program now under way.

In addition to a number of preparatory weekend trips and other conditioning programs each participant will make his own pack frame to fit his individual requirements.

The Sierra trip will cover approximately 70 miles, departure point will be Bishop, Calif. Adviser will be Gene Boyd (Dept. 197-6), assisted by Andy Drollinger of Astro.

Youths can obtain additional information by attending a squadron meeting which is held each Tuesday evening at 7 at the club headquarters on Harbor Drive, directly across from the Ryan main gate.

Particulars can also be obtained by contacting Shaulis, ext. 1829, SD Plant 1, or Boyd, ext. 645, Plant 2.

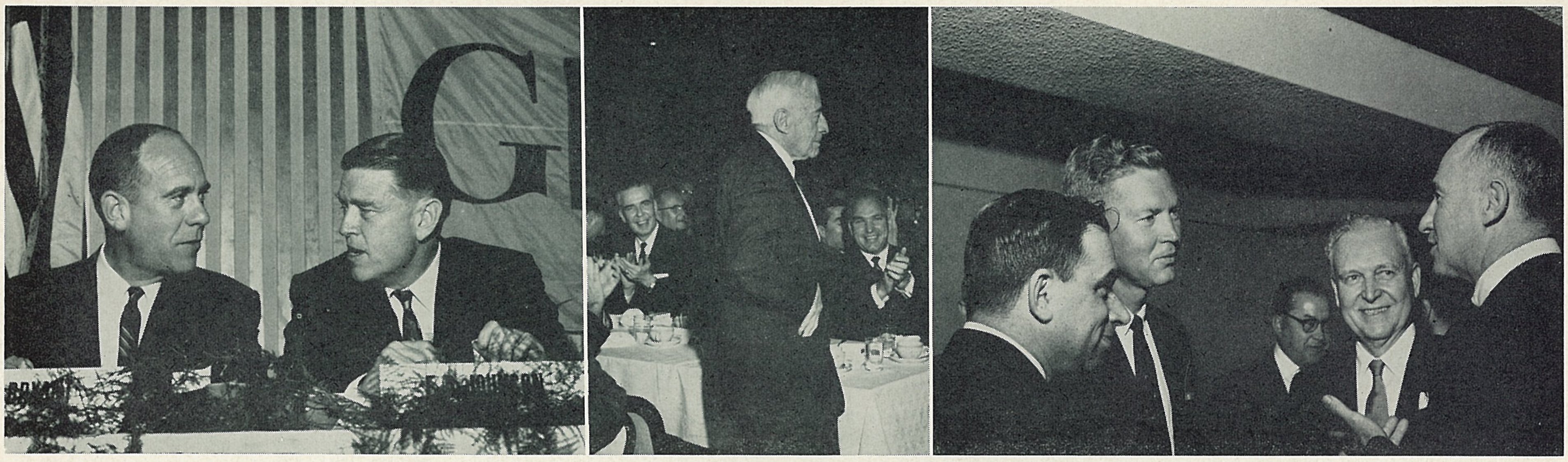
MOUSE WEEKENDS IN HAYNES' HAT

FORBES AFB—Convair "hard hats," a must for men engaged in activating Atlas missile facilities, serve many purposes, even "mouse keeping."

Best equipped to testify, from experience, is B. G. "Bill" Haynes, an Astronautics mechanic assigned to Complex 5, according to Jane Cordner, **Convairiety** correspondent here.

Seems Haynes hung his hat in its accustomed place and departed for the weekend. An enterprising field mouse spotted the liner as a good spot to build a nest and did so.

When Haynes donned the hat the mouse began running in circles. Haynes came out of the hat in quick time and the mouse beat a hasty retreat.



SAN DIEGO VISITORS—At right, Frank Pace Jr., board chairman of General Dynamics Corporation, chats with J. R. Dempsey, Astronautics manager, and Elmer Wohl, Convair vice president-planning, and guest M. T. Moore at gathering prior to Astro Management Club meeting last month. At left are Earl D. Johnson, Dynamics president (right) and E. D. Bryant, Astro operations manager. Center: Otto Marx, 91, introduced as "grand old statesman" of General Dynamics.

Osaka Concern Dynapak Sales Agent in Japan

NEW YORK — An agreement appointing Nichimen Company Inc., of Osaka, Japan, as general agent for sale and distribution of the Dynapak line of high-energy-rate metal forming machines in Japan has been executed by the General Dynamics Corporation.

Dynapak is a revolutionary new pneumatically-energized machine tool capable of performing a wide variety of metalworking tasks, including forming, extruding, blanking, forging and compacting. It already has demonstrated its capability of working such "difficult" space age materials as tungsten, titanium, columbium, zirconium, and cermets, as well as stainless and carbon steels, copper, aluminum and other more conventional materials.

The first Dynapak machine to be exported to Japan will be exhibited and demonstrated at the International Trade Fair in Osaka in April.

Nichimen will establish a separate department to handle sales and service for the Dynapak machines.

This is General Dynamics' first distribution of Dynapak machines overseas. Distribution in this country is handled by direct sales representatives.

Marine Technology Laboratory Created By GD/Electronics

ROCHESTER — Establishment of a Marine Technology Laboratory in the Military Products Division of General Dynamics/Electronics, and appointment of John K. Liu as its manager, have been announced by David Y. Keim, director of engineering for the division.

Liu comes to General Dynamics from the U. S. Industries Technical Center at Pompano Beach, Fla., where he was director of marine technology, and had full responsibility for the development and construction of underwater equipment, including underwater television, undersea grappling devices, and advanced systems and controls.

Liu holds a BSME degree from the University of Pennsylvania, and an MS in mechanics from the Illinois Institute of Technology, and has completed his course work for a Ph.D. at the same institution.

Born in Hankow, China, Liu has lived in Germany and Italy, and speaks German and Chinese, in addition to English.

Information Agency Will Use Atlas Film

A special 10-minute feature film on the Convair Atlas will be distributed in some 80 countries by the United States Information Agency. The sound track has been translated into 20 languages.

GENERAL DYNAMICS CORPORATION NEWS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of seven divisions and a Canadian subsidiary, Canadair Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles, and space systems.

Electric Boat of Groton, Conn., submarines.

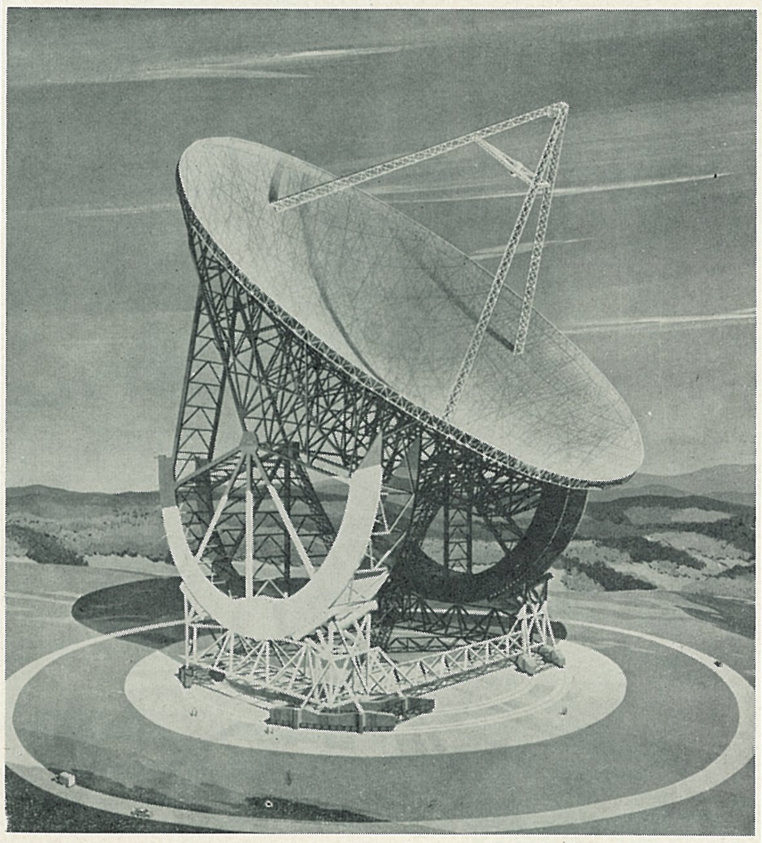
General Dynamics/Electronics, Rochester, N. Y., Los Angeles and San Diego, Calif., telecommunications, electronics equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.

Material Service Division, Chicago, Ill., building materials, concrete products and coal.



NAVY'S "BIG DISH"—Artist's conception shows world's largest radio-telescope now under construction for Navy in Sugar Grove, West Va. Electric Boat has $19,314,432 contract to provide drives, controls.

Electric Boat to Build Radio-Telescope Drives

GROTON—Electric Boat Division has been awarded a $19,314,432 contract to provide drives and controls for the Navy's 600-foot "Big Dish" radio-telescope.

Prime contractors for the entire $100,000,000 telescope project, now under construction at the Naval Radio Research Station, Sugar Grove, W. Va., are Tidewater-Kiewit-P.E.C.

In addition to the drives which will suppport and rotate the 30,000-ton telescope, Electric Boat will also supply the electronic control systems to interpret signals from the telescope's computer so as to position the world's largest movable land object with the accuracy of a fine watch. The electronic ears of the telescope's 7½-acre "Big Dish" are expected to have an interstellar range of billions of light years.

When the telescope is completed, part of the total operating time will be given to purely scientific studies such as radio astronomy, research in the characteristics of the earth's atmosphere, and gathering new geodetic and geomagnetic data on the earth itself. The remainder of the time will be used for advanced research in radio communications and navigation. Achievement of the desired results will depend to a large extent upon the precision drive and control systems to be supplied by Electric Boat.

Electric Boat's subcontract calls for providing 128 azimuth drive units to support the entire telescope structure and 128 elevation drive units to support the two semi-circular altitude "ferris wheels" on which the dish is mounted.

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Electric Boat has occupied a new industrial assembly building designed to give the division greater manufacturing flexibility. The 65,000 square foot structure will first be used for assembly work on the Navy's new telescope.

Bridge Busters

Radio Controlled Bombs Added To Bite of B-24s in Burma Raids

(This is installment No. 55 in Convairiety's continuing history of Convair and its aircraft.)

During the liberation of Burma, October, 1944, to May, 1945, the 7th Group's heavies ranged far into Burma from Thailand, Indo-China and Malaya. One notable mining operation was conducted in October by B-24s flying a 3,000-mile round trip from Kharagpur, India, to sow the inner approaches to Penang, Malaya.

A high-priority target, the Ban Dara bridge in Thailand, was wrecked by Liberators Nov. 3. The next night they made a heavy, successful attack on the Makasan workshops in Bangkok. (By now, devices for increasing the bomb load and conserving fuel made it possible for B-24s to take off from India and carry a load of 8,000 pounds of bombs to Bangkok, 1,000 miles away.)

The "Azon" bomb, controllable by radio in flight, was put into use by the 10th AF in December, 1944, and proved invaluable as a bridge buster. Use of this weapon, requiring special equipment and trained personnel, was given to the 493rd Squadron. Stratemeyer reported in 1945 that "Azon bombing continues to be highly successful, with one mission getting four bridges with four bombs."

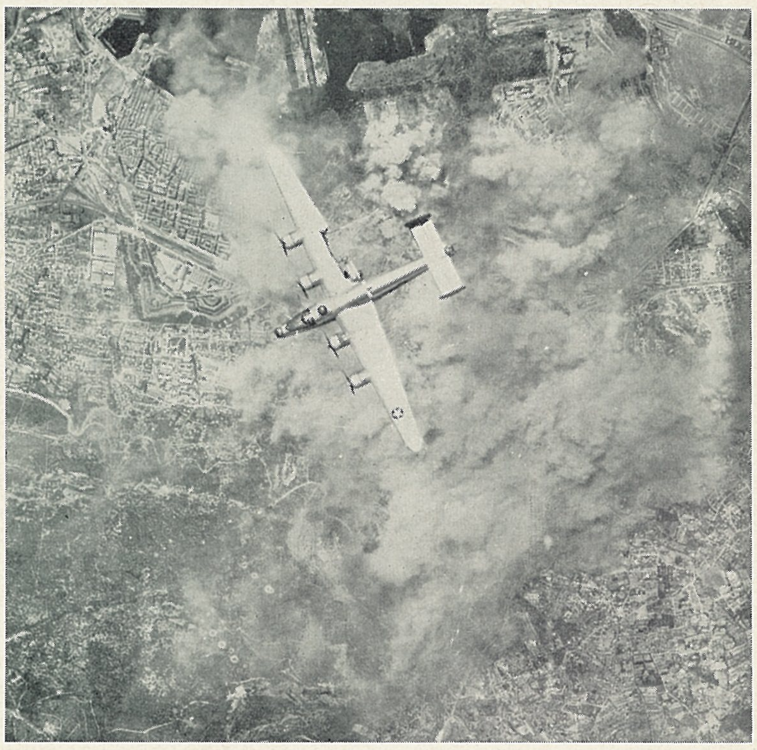
In China the Japanese ground forces overran most of the airfields used by the 14th AF in 1944 and early 1945. To assist a Chinese army that continued to fight along the Suichwan-Kukong axis, Chennault in November organized the East China Air Task Force, largely a fighter outfit but having a B-24 detachment from the 308th Group. After collapse of Chinese resistance in that area, the 308th's Liberators took up pounding the enemy's rail repair depots in north China. In a major strike March 9, 1945, a force of 31 B-24s with 12 escorting Mustangs took off from Hsinching and Kwanghan for a mission against Sinsiang that destroyed 17 warehouses and damaged or destroyed seven locomotives. Similarly successful raids followed against rail yards at Shih-chia-chuang and Tsinan.

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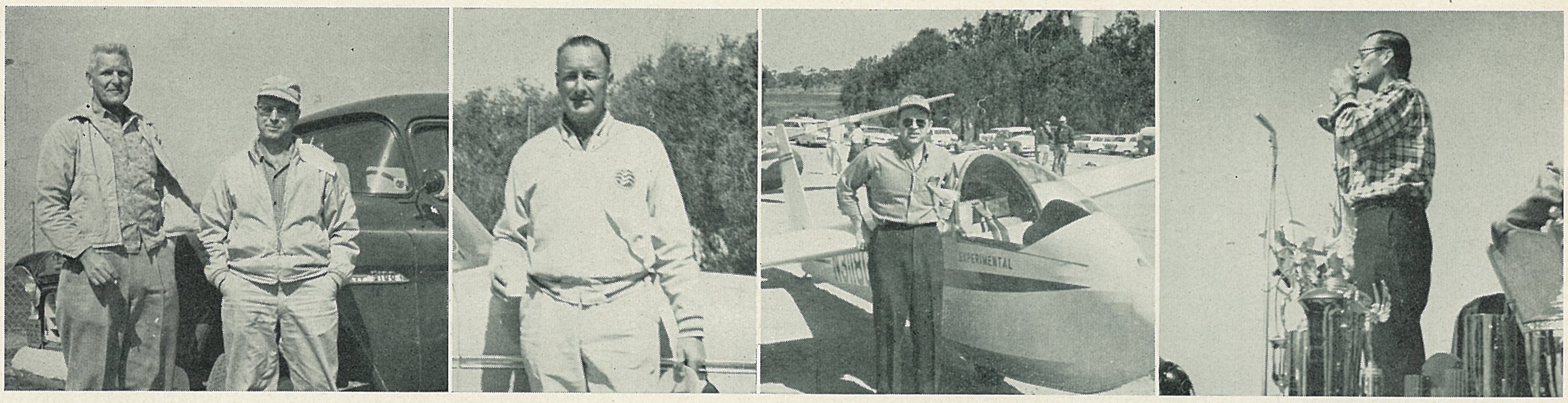
In the Battle of the Atlantic, the Liberator's endurance made it a favorite of all anti-submarine forces. Until mid-1943, the AAF supplied most of the land-based craft searching from the Americas, and B-24s equipped with microwave radar began coming into service in the fall of 1942. This was about the time the AAF Anti-Submarine Command (Brig. Gen. Westside T. Larson) was formed.

By 1943 the command had 25 squadrons, composed chiefly of B-24s modified for VLR (very long range) service—capable of cruising outward 1,000 miles and remaining on station four hours before starting home. Carrying less armor and fewer guns, these Liberators had extra fuel capacity and electronic gear.

The first special Liberator unit to go overseas was the 1st Army Anti-Submarine Air Squadron (Lt. Col. Jack Roberts), dispatched to England in November, 1942. The 2nd AAAS followed in January, and both took part in the Bay of Biscay anti-U-boat offensive before moving on to Morocco to search from Port Lyautey as elements of the 480th Group. The 6th and 19th Squadrons were shifted from Newfoundland to England in the summer of 1943, serving as the 479th Group, attached to the RAF Coastal Command. In July they racked up three U-boat kills.



A WING AND A PRAYER—This was sometimes literally true for rugged Consolidated B-24s during World War II. Here a B-24 with badly damaged right wing maintains station in bombing run despite crippled condition.



CONVAIR SUPPORT—SD and Astro men worked behind scenes at 15th annual soaring championships at Torrey Pines last month. At left are two men who towed gliders, Bruce Olson (SD Dept. 34) and Carl Nielus (Dept. 6). Taking time for coffee is Ted Sanford (SD Dept. 6) who was official scorer. Next is CRA Commissioner Vic Korski and at right is Jim Spurgeon (Dept. 6), master of ceremonies. Yearly event drew field of 45 pilots, 21 sailplanes from West Coast.

42 Mgt. Club Bowling Teams Enter Tourney

Honors were almost evenly distributed between Convair San Diego and Astronautics bowlers taking part in a Management Club keg event staged jointly by the two groups Feb. 26 at Clairemont Bowl.

The Astro Hawks (Dave Buckles, Hank Brenner, M. Chilcote, Jack Garrison and Cliff Bradley) copped high team scratch honors with a 2,682-pin total.

Convair SD's Jets won team handicap series honors with a 3,094 total. Team members were Carl Martens, Frank Westphal, William Timm, Milt Hangen and Gordon Stickney.

Hank Brenner (Astro) rolled a walloping 260 game for high individual scratch laurels, while Bob Beezley (SD) had high scratch series with a 652. Astro's E. W. Grugel had high handicap game with a 279 with Astro's H. E. Mowery posting a handicap 703 series for high.

The event drew 42 teams, 20 from Convair SD. Astro's Forrest Erwin and SD's Bob Beezley served as tournament directors.

The event leads into the annual Southern California National Management Association tournament coming up this weekend (March 18-19) at Clairemont. Approximately 200 teams from throughout the area are expected. Both Convair operating divisions are expected to field 16 teams each. In addition, Astro's MSTS operations will send two teams, while two others are expected from Astro's Vandenberg AFB organization.

Convair Engineers Pass State Exams For Registration

Ten Convair engineers, nine from Astronautics and one from Convair SD, have qualified as registered professional engineers in California.

All successfully passed a written examination given by the state.

Registered as mechanical engineers were Emmet H. Christensen (Dept. 595-1), David R. Lukens (Dept. 597-1) and Edward Zinten (Dept. 547-4) of Astro and Paul P. Leo (Dept. 63-20) of Convair SD.

Registered as electrical engineers, all from Astro, were Robert O. Elliston (Dept. 556-7), Clark M. Hay (Dept. 556-7), Dale P. Schrick (Dept. 556-7), Ralph R. Heinrich (Dept. 556-7), Otto H. Paris (Dept. 531-3) and Hubert B. Sturtevant (Dept. 547-3).

STROMBERG SETS AT MAY COMPANY

A new outlet for Stromberg-Carlson stereophonic equipment and components has been added to the list of approved dealers in the San Diego area. Convair San Diego and Astronautics purchasers may use their company discount at the May Co., in the Mission Valley Center.

Convair Pilot Totals 554 Points To Win Soaring Championships

Convair sailplane pilot Sterling Starr swooped to victory Feb. 26-27 at the 15th annual Pacific Coast Midwinter Soaring Championships.

It marked the second time in as many years that a Convair man won the event which is conducted at the picturesque Torrey Pines Gliderport. Last year's winner was Dave McNay of Convair Pomona.

In addition to Convair contestants a number of Convair SD and Astro men helped handle ground support tasks. They included C. F. Stark, Doren Curtiss, Dick Swinson, Ted Sanford, Vic Korski, Jim Spurgeon and others.

The championships are generally acknowledged as the most unusual and interesting soaring contest in the world. In the Torrey Pines "natural stadium" spectators can view a beautiful seascape and fascinating sports contest.

Attendance at this year's two-day meet was estimated in the neighborhood of 25,000 by the Associated Glider Clubs of Southern California, which co-sponsored the meet with the Junior Chamber of Commerce.

Entered in the contest were 45 pilots and 21 sailplanes. Most of the contestants were from San Diego and Los Angeles areas, but one came from as far north as Lexington, Oregon.

Meet winner Sterling Starr flew for a total of 554 points, twice as many points as registered by runner-up Keith Allen who amassed 271.

Starr's scoring in contest categories broke down as follows: 32 in duration; 360 for altitude; 75.5 in spot landing; 86.5 for distance flight. Starr's altitude total, which was the highest in the meet, won for him the Convair trophy.

Other Convair contestants who placed in various events were George Tweed of Astro, third in duration, 60.4 points; John Williams of Convair SD, first in distance flight, 106.9 points; Dave McNay, second in dual distance flight, 6 points.

Convair's Ted Sanford, who was official meet scorer, said this year's event was from every viewpoint the best Torrey Pines contest to date.

"Safety was constantly monitored," he said, "and not a single accident or incident marred the two-day show."

Entries Open For Golf Club March Sweeps

Next Convair Golf Club sweeps is slated for March 25-26 at Circle "R" Ranch, with reservations now being accepted by Juanita, Astro ext. 1158, and Inga, Plant 1, ext. 468.

At the previous event, 185 golfers turned out for a "Best Nine" round at Coronado with play in six handicap brackets.

Top linksmen in the 0-10 handicap set were Don Cheek, 63; Al Reiter, 67; and Dick Parmley, 68. Major Clark and Sam Richter, 61; M. Quackenbush, 62; and Les Lundquist, 63, took honors in the 11-13 handicap class.

Winners in the 14-16 category were Carl Carver, 62; Jim Jones, 66; and Ed Bourgeois, 67; with Jack Viskil and Ben Ziegler, 65. Bert Emerson, 68; and Walt Bore and Ivan Raney, 69, bested the 17-21 field.

Curt James, 65; C. M. Keys, 68; and Quentin Arbo, 70, placed among the 22-26 handicappers. In the 27-36 handicap group honors went to Jack Boyle Sr., 65; Cliff Grant, 68; and C. Crocker, 70.

Saturday Archery Shoots Scheduled For Junior Group

Saturday shoots are in the offing for junior and intermediate archers at Convair SD and Astro if sufficient number display interest.

Al Phipps, Archery Club spokesman, said the Saturday shoots are being planned because many youngsters attend school or church on Sunday morning when archery events are regularly held.

If enough youngsters demonstrate interest, field shoots would be scheduled Saturday noons at the Balboa Park Range. Prizes, awards and refreshments will be included. Those interested should contact Phipps, CY-5-8194.

Those planning to participate should have their own archery equipment, they should also be willing to join the Convair Archery Club.

Next club event will be an open trophy shoot April 9 at the Balboa Park Range. The all-day affair will start at 9 a.m.

Convair Squad To Play in LA

Convair Astronautics varsity softball team, which is composed of players from both Convair SD and Astro, will play an exhibition game in the Los Angeles Coliseum at 1 p.m. March 26.

The team, which is a member of the Western Softball Congress, will play the exhibition as one in a series of sports events being held in conjunction with the Sportsmen Show at the Los Angeles Arena.

The Sportsmen Show opens at the arena on March 17 and will run through March 26. The Western Softball Congress in conjunction with the Amateur Softball Association is sponsoring a booth.

Congress league activity will start April 29. The pre-season ASA softball tourney in San Diego will start early in April with games to be played at Helix Field in La Mesa and National City Recreation Field.

Saturday Schedule For Salvage Yards

Salvage yard schedule at Convair SD and Astronautics locations for the next four Saturdays are: San Diego yard open March 18 and April 1; Astro yard open March 25 and April 8.



TOP SPOT—Glider champion Sterling Starr (SD Dept. 6) receives John J. Montgomery trophy from Diane Baker, queen of soaring contest. Starr won meet going away as he collected 554 points. Below is John Williams, who placed first in distance flight.

Jim Poole Plant Champ In Badminton Tourney

A total of 40 entries from both Convair San Diego and Astronautics participated in the Fourth Annual Plant Badminton Tournament held March 4 in Balboa Park's Federal Building.

In class "A" men's singles, Jim Poole (Astro) edged Bill Berry (Astro) 15-10, 15-3 in the finals, while Art Rundell (SD) topped Dennis Sealey (SD) 15-7, 15-4 in the consolation match.

Sam Sotelo (SD) topped Dan Bain (Astro) 15-5, 18-15 in class "B" men's singles finals, while a 15-8, 8-15, 15-4 series swayed honors to Les Marr (Astro) over Bob Harold (Astro) in consolation.

Finals in novice men's singles went to Mike MacGrath (Astro) over Paul Nissley (Astro) 15-1, 15-1.

Ruth Berry topped Marie Henningsgaard 11-1, 11-1 in class "A" women's singles, and Carol Jones downed Katie Marr 13-10, 11-1 in the consolation round. All contestants in this class were from Astronautics.

In men's class "A" doubles, it was Berry and Gene Borlin (Astro) over Poole (Astro) and Bob Hoot (SD), 15-4, 15-10, while consolation honors went to Art Rundell (SD) and Marr (Astro) over Dennis Sealey (SD) and MacGrath (Astro), 15-4, 15-10. Bob Morin (Astro) and MacGrath won over Dan Nehrer (Astro) and Jack Durcan (Astro) 15-6, 15-8 in class "B" men's doubles.

Bill and Ruth Berry (Astro) topped Dennis and Hilda Sealey (SD) 15-9, 15-10 in class "A" mixed doubles, with Les and Katie Marr (Astro) edging Jerry and Marie Henningsgaard (Astro) 15-10, 15-3 for the consolation prize.

Sports Car Club Sets March Rally

A breakfast rally for Convair SD Sports Car Club members is planned some time during March, with information to be mailed to all members.

SD winners in the recent Atlas Rally III, sponsored by Astro Sports Car group, included Mr. and Mrs. Lou Barnes who placed fifth in the Seat of the Pants class.

CRA Sports & Recreation Convairiety

Eight-Day Hawaii Trip Offered for Low $299

A trip to the land of leis and hula girls is in the offing this summer for Convair San Diego travelers who take advantage of a CRA-arranged "Hawaiian Holiday."

Vacationers who sign up for the eight-day island tour will leave from Los Angeles July 15 and return July 23 via a Pan American World Airways DC-7. Reduced-price cost, through CRA, is $298.50 per person for round-trip air transportation, hotel accommodations based on two to a twin-bed room, special meals during itinerary.

Reservations must be made at the CRA office, Bldg. 32, Plant 1, ext. 1245, before May 1 with a $50 deposit at time of signing. The balance is to be paid by June 1.

Special features arranged for the pleasure of Convair sightseers by Fugavy Travel Bureau, Inc., will include a royal welcome on arrival at Honolulu with a get-acquainted party at the Waikiki Beach hotel, base of the Convair group.

Days will be crammed full of interesting experiences and sights for Convair tourists—Pearl Harbor cruise in the world's largest catamaran; all-day scenic tour of the island of Oahu; drive to Mt. Tantalus and luncheon at the picturesque Waioli Tea Room; visit to the "Kodak Hawaii" hula camera show in Kapiolani; displays of Hawaiian net-throwing, Samoan knife dancing, hulas and other native dances; tour of Hawaiian Pineapple Co. plant at Iwilei; a luau where guests will be introduced to such island delicacies as kalua pig, lomi lomi salmon, moa, poi, lau lau.

Free time will be provided for swimming, surfing, outrigger canoe riding, shopping, or just loafing in Alohaland.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

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ARCHERY — Open Trophy Shoot April 9, Balboa Park Range, 9 a.m.

BOWLING — Summer leagues forming. Call Jim Hayman, ext. 1155, Plant 1.

BRIDGE CLUB — Next session March 21, 7:30 p.m., Hotel Barcelona, 326 Juniper St.

CHORALAIRES — Rehearsals each Monday evening, 7:30 p.m., CRA Clubhouse, Pacific Hwy.

COIN CLUB — Meeting March 21 starting with potluck supper at 6:30 p.m. in Hearing Aid Society Bldg., 3843 Herbert St.

DELTA DIVERS — Family dive, noon, March 26, Casa Beach, La Jolla. Meeting and talk on SCUBA diving Tuesday (March 28), 7:30 p.m., Room 3, Balboa Park Conference Bldg.

GOLF — Yater Memorial April 1-2 at Coronado and April 8-9 at Flying Hills. Entries close March 24 at ext. 1705, Plant 1.

JUDO—Workouts and instruction every Thursday in CRA Clubhouse on Pacific Hwy., 6-7:30 p.m.

MOVIES—Reduced-price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB — Next shoot March 25, San Diego Police Pistol Range, 9:30 a.m.

RADIO CLUB — Meeting tomorrow (March 16), 7:30 p.m., Harbor Drive Headquarters.

ROCKHOUNDS — Field trip March 25-26 to Boron area.

ROLLER SKATING — Convair skate night Monday (March 20), 6:30 to 9:30 p.m., Skateland, Front and G Sts. Tickets available at SD employee services.

SOLO FLYERS — Ground school classes now under way Wednesday evenings, 7:30 p.m., Jim's Air Service, Lindbergh Field. Call Rex Robinson, ext. 2265, Plant 1, for information.

SPORTS CAR CLUB — Breakfast rally March 26. For members only.

VOLLEYBALL — Convair shop league season now under way. Call Pete Beyrer, ext. 1245, Plant 1.

Busy Meeting For Coin Club

A packed program is planned by Convair SD Coin Club Tuesday (March 21) which will include a potluck supper, quarterly exhibit, door prize drawing and coin auction.

Each family attending the 6:30 p.m. potluck supper is asked to bring its own table service as well as a covered dish large enough to serve the family and three additional persons. Coffee, tea, or milk will be served by the club.

No special theme has been selected for the exhibit so the best numismatic displays of all types will win the five awards, according to A. L. Baber, club president.

The customary "members only" drawing will be for a 1961 proof set, provided it arrives from the mint by meeting time, if it does not, a $5 gift certificate will be awarded.

Members and visitors are reminded that the March 21 meeting will be the last held at the Hearing Aid Society Bldg. Starting in April, meetings will be held on the third Thursday of each month in the executive cafeteria, 3163 Pacific Hwy.



RIDERS AND DANCERS—Top left photo is scene at recent Poway Valley Horse Show which was attended by many Convair riders. Other photos were taken March 5 when Convair SD Riding Club presented its second open horse show and gymkhana of year. Standing in upper right photo are Melvin Ishmael, show manager, and C. L. Pogorel, commissioner. Lower left: Bob Riding (mounted) receives trophy from Jim Hill. Lower right: Convair Hoedowners who put on square dance exhibition during noon intermission.

Golf Entries Open for Yater; Top CRA Medal Play Tourney

Two red-letter weekends, April 1-2 and 8-9, are coming up for Convair SD CRA golfers.

Those are the dates for CRA's top medal play tourney, the Yater Memorial, which will be played the first weekend at Coronado and the second at Flying Hills.

CRA Commissioner Ken Wulfemeyer said entries for the classic will open today (March 15) at ext. 1705, Plant 1, and close on March 24.

As in the past, a strong field of the operating division's top linksmen are expected to participate. Established handicaps are required for the event and the overall low net tourney winner will receive the Yater Memorial trophy which rotates from winner to winner each year on a perpetual basis.

Wulfemeyer said entrants in the 36-hole tourney will be asked to post a $1 entry fee, payable at the first tee, which will be used to purchase prizes. These will be awarded to low net and low gross winners in each of the four handicap groups.

Winner last year was Curtis Tanner (Dept. 6) who netted a 130, playing two consistent rounds of 83 to an 18-stroke handicap.

★ ★ ★

A total of 145 golfers entered the CRA sweeps last month at Caliente though rain washed out some of the weekend play.

Low gross leader was Ron Hinrichs (Dept. 14) with 77, who was trailed by Ray Minutello's (Dept. 6) 79. Bill Gosch (Dept. 6) was low net with 66. Tied for the runner-up spot with 70s were Sterling Campbell and R. McCullough, both Dept. 6.

In the 16-20 handicap bracket Francis Sisson (Dept. 6) led the field with an 84. Leila Fisher (Dept. 6), only woman golfer to place in the sweeps, was second low gross with 90. First low net was Gene Howell's (Dept. 6) 71; second was Joe Odaffer (Dept. 15) with 73.

Low gross in third flight was John Sawicki (Dept. 6), 94; second was Charles Keys (Dept. 15), 99. Low nets were scored by John Murphy (Dept. 190), 69, and Clinch Crocker (Dept. 91), 72.

SCUBA Diving Topic At March Meeting

A medical officer of the submarine tender USS Sperry will discuss SCUBA diving at the Tuesday (March 28) meeting of the Convair SD Delta Divers.

Lt. I. H. Rex Jr. will describe the potential dangers involved in repetitive SCUBA diving and outline a safety program which should be followed. The meeting will start at 7:30 p.m. in Room 3 of the Balboa Park Conference Bldg. All interested are invited.

Also on the club's agenda is a family dive at noon on Sunday (March 26) at Casa Beach in La Jolla. A swim dive checkout will be given all potential new members.

Regular weekly get-together diving meets are held each Saturday at 9 a.m. at the Diving Locker, Pacific Beach.

BORON TREK SET FOR ROCKHOUNDS

Petrified palm, petrified bog, chapenite, and bloodstone will be the quest of Convair SD Rockhounds on their March 25-26 trek to Boron.

Weekenders will have the added opportunity of attending the annual gem and mineral show of the Mohave Mineralogical Society, which yearly attracts rock hunters from all over.

Dan Whorton, CRA commissioner, urges everyone interested in joining the expedition to call him at ext. 426, Plant 1.

SD Chess Expert Conducts Classes

Convair SD chess expert Newton Grant (Dept. 6) is presently conducting a Wednesday evening lecture series on chess at the Downtown YMCA.

Grant, who is current San Diego City and County champion, will continue classes through May 3 between 8 and 9:30 p.m.

Prerequisite for the course, which started March 1, is a basic knowledge of the movements of the chess pieces. Enrollment is limited. For information, call Bruce Barr, BE-2-7451.

Williamson Tops Pistol Events

Joe Williamson (Dept. 401-5) again stood on top of the heap as double-winner in Convair SD Pistol Club matches Feb. 26, said Ash Bishop, commissioner.

Williamson led the master class with a score of 290 and 9 "X's" and swept the field in the center fire Short National Match with 263.

B. L. Broadway (Dept. 115) was a close second in the master, equaling Williamson's 290, but losing out by two "X's." Jim Halfacre (Dept. 180) was third, just a point behind, with 289.

In the expert class V. L. Summitt (Dept. 3) copped a trophy as special award for setting a new low with the presentation marked by an ovation from participants and spectators.

Expert class winners were W. G. Walker (Dept. 6) with 286 and Ralph Picard (Dept. 7) three points behind with 283. Top sharpshooter was Bill Ginsky (Dept. 6), 241; Harvey Ingalls (Dept. 6), second, 237. In the marksman class L. L. Richeson (Dept. 129) was high with 228, just a point ahead of runner-up Chuck Van Der Way (Dept. 6).

Williamson's top score in the Short National barely bested the 262 shot by Jim Halfacre (Dept. 180). Third was E. E. Bickar (Dept. 215) with 259; fourth, Ralph Picard (Dept. 7), 256; fifth, Carl Hornburg (Dept. 139), 253.

SD's Summer Bowl Leagues Organize

That time is here again! At any rate, the time for forming Convair San Diego summer keg leagues, reminds Jim Hayman, CRA commissioner.

Now planned for the summer season are nine leagues, all timed for 6:30 p.m.

For information call the following managers:

Monday, Bowlero in Mission Valley, Tony Zullo, ext. 1205; Monday, Clairemont, Don Walin, ext. 1437; Tuesday, University, H. Skilton, ext. 1437, or Herb Rifkin, JU-2-3989; Tuesday, Bowlero, Bob Heath, ext. 2794; Wednesday and Thursday, Pacific Recreation, Hayman, ext. 1155; Thursday, Victory Lanes, Bob Heath, ext. 2794; Friday, Clairemont, Dave Caffo, ext. 1424; Friday, Tower Bowl, Mike Brooks, ext. 1241, Astro site, or Hayman, ext. 1155, Plant 1.

CONVAIR SD SON AN EAGLE SCOUT

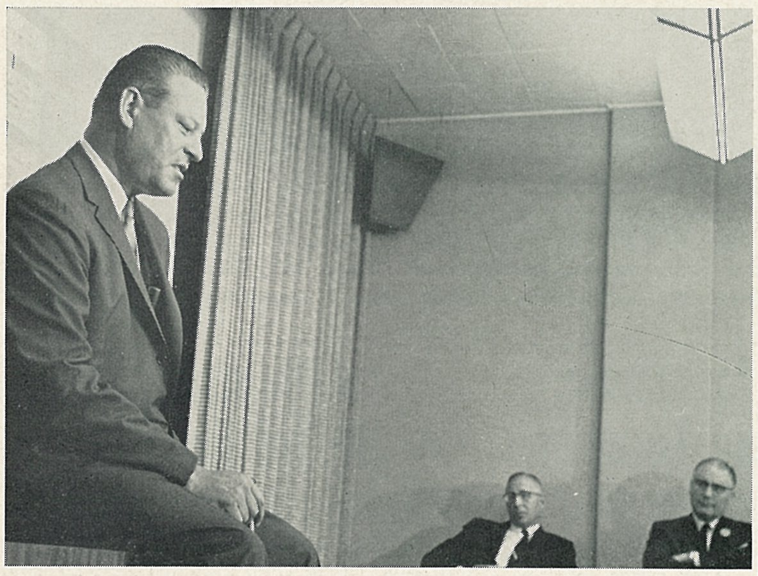
Harry A. Whiting Jr., 14, whose father is in Dept. 190 at SD, advanced to Eagle Scout March 9 at a Troop 144, Santee, Court of Honor.



BOWLED OVER—Top Convair SD keglers who participated in Management Club tourney Feb. 11 at Clairemont Bowl received awards last week. At far left is Larry Lawson, club president, who made presentations to (from left) Frank Westphal, Carl Martens, Gordon Stickney, William Timm, Milton Hangen and R. W. Beezley.



IT WAS "SRO"—Virtually all 1,300 chairs in Convair SD's cafeteria were occupied last week when C. Rhoades MacBride addressed supervision. He spoke without notes and with scarcely a single hesitation, answered questions from the floor, touched on business prospects and explained his management philosophy.



AT CONFERENCE—Spectators at MacBride press conference were W. P. Gullander, seated right, General Dynamics executive vice president-finance and administration, and R. H. Biron, Convair vice president-administration.

Escape Capsule Successfully Fired From Static Hustler

First static-firing of an escape capsule from a B-58 Hustler at Convair FW this month was a "near perfect" success.

"All test aims were accomplished," reported C. C. Widaman, assistant project engineer.

Weighted to simulate occupancy, the production-type capsule was fired by remote control from the Hustler's second station, specially beefed up for the occasion.

The rocket catapult fired the green-colored capsule free of the plane and a split second later the capsule's powerful rocket engine started, blasting the capsule about 250 feet up and forward.

At its apogee, the escape system's parachute popped open, floating the capsule to earth.

It made a soft landing in a pasture 250 feet away.

All four phases of the ejection—catapult, rocket engine, stabilization system, and recovery system—worked to near perfection, according to Widaman, who lauded the "intensive team effort" of engineering and shop personnel in making the ejection successful.

The static firing is another step toward ejecting a man in an escape capsule from a B-58 Hustler flying at Mach 1.3, expected to take place later this year at Edwards AFB.

Widaman will captain a team of about 35 from Fort Worth slated to start tests in April, which will last about six months. First ejections will be made with an articulated dummy, capable of making all basic movements man can make. All ejections will be successfully completed at subsonic speeds before supersonic ejections are tried.

C. Rhoades MacBride Assumes Charge of Convair Operations

(Continued from Page 1)

as member and later as leader of a team of consultants serving Convair. This started as a three-month assignment from Floyd Odlum, head of Atlas Corporation, at that time owner of the controlling interest in Consolidated Vultee Aircraft. But one assignment led to another and by the time the mission was terminated two and a half years later General Dynamics had acquired controlling interest in Consolidated Vultee Aircraft. (During this period MacBride and his family lived in Coronado.)

Prior to that, MacBride's roving assignments for Heller had included a year and a half at Baltimore headquarters of the Martin Company (aircraft) and afterward he joined in such tasks as setting up a budgetary control system for Westinghouse; spending a year in residence at Electric Boat, another General Dynamics division; setting up an executive compensation plan for Baldwin-Lima-Hamilton; helping the Navy organize a pilot training program; and participating in the reorganization of Loews, Inc., parent company of Metro Goldwyn Mayer.

MacBride is a native of Chicago, Ill. and attended Lehigh University, where he studied economics and metallurgy. He joined the Edgewater Steel Co. of Verona, Penn., in September, 1932, and was made assistant superintendent-rolling mills in 1934. Two years later, in June, 1936, he joined the Personal Finance Co., Pittsburgh, Penn., and in January, 1938, entered the sales department of A. M. Byers Co., Pittsburgh, and in a little more than a year was made manager of its engineering service department. He joined Westinghouse Electric Corp. as manager of market development for its Southwestern district in June, 1940, and served in this capacity until April, 1942, when he went on active Navy duty.

During his active military career, which lasted until November, 1945, MacBride was engaged in various aspects of the Navy's aircraft production program. He also served afloat with the Fleet Air Wing, attaining the rank of lieutenant commander, USNR. Following his Navy service he joined Robert Heller & Associates.

Astro's Employment Over 25,000 Point

Convair Astronautics employment on March 3 soared beyond the 25,000 mark for the first time.

Of this total, about 8,000 were located off-site. Vandenberg AFB has replaced Warren AFB as the largest off-site base with a total of about 1,300 persons. Fairchild AFB is next with 1,125, followed by Warren AFB, Air Force Missile Test Center and Offutt AFB with about 1,000 each.

Others include 900 at Forbes AFB; 550 at Sycamore Canyon; 290 at Missile Static Test Site.



WOMEN'S WORLD—Mildred Fowler (Dept. 44), seated, discusses her record-breaking Employee Suggestion with assistant supervisor Evelyn Kellogg. If savings continue as anticipated, Mrs. Fowler will be winner of largest ES award ever won by woman at Convair SD.

Mildred Fowler's $1,215 Idea Expected to Set New Record

Mildred T. Fowler's tenth anniversary with Convair fell in February so last month she celebrated in a big way — she collected a check for $607.50.

It was the first installment of what will be the largest Employee Suggestion award ever earned by a woman at Convair San Diego. In six months, under Employee Suggestion ground rules, she will receive another check for the same amount, if savings continue as anticipated.

Mrs. Fowler's total award — $1,215.50 — will be only some six dollars short of matching the all-time Convair ES record for women which is held by Mrs. J. R. Moran of the Fort Worth operating division.

Actually, last month was the second time in three months that Mrs. Fowler rang the Employee Suggestion bell. In December she collected a $252 Employee Suggestion award.

In both of her suggestions, Mrs. Fowler (who is in the parts listing and cataloging group in Dept. 44-4) recommended that methods in use be discontinued because they were no longer necessary to the success of the operation.

Cost reduction analysts found her latest recommendations would save Convair $12,155 during a 12-month period for a record total of company savings attributed to a woman.

Her latest ES advised that planning codes 4, 5, 6 be discontinued when listing parts. Mrs. Fowler pointed out these codes represented 60 per cent of the cards being coded and that they were no longer necessary, because planning code 3 would supply all the planning and engineering information required.

(The 880/990 parts listing interprets and transforms engineering and planning and related sources in keypunch format. From this evolves the Master Requirements Deck, called the TC-35. This in turn becomes input into the 705 computer which prints out the Material Status Report.)

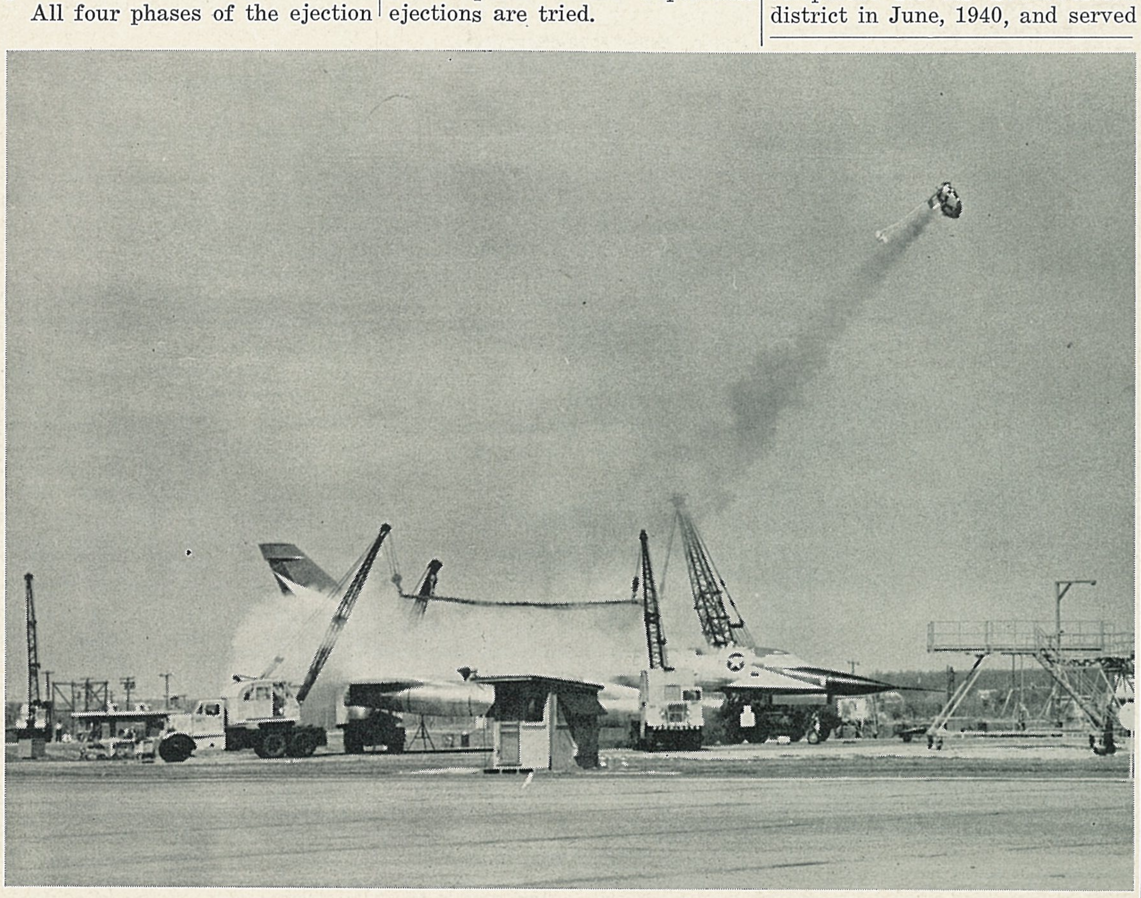
L. E. Grigsby, supervisor of parts listing and cataloging, pointed out that Mrs. Fowler's Employee Suggestion eliminated planning codes but not parts listing of requirements where any material is involved.

He said the elimination of codes was a realignment of code application which greatly simplified the operation, yet obtained the same end result.

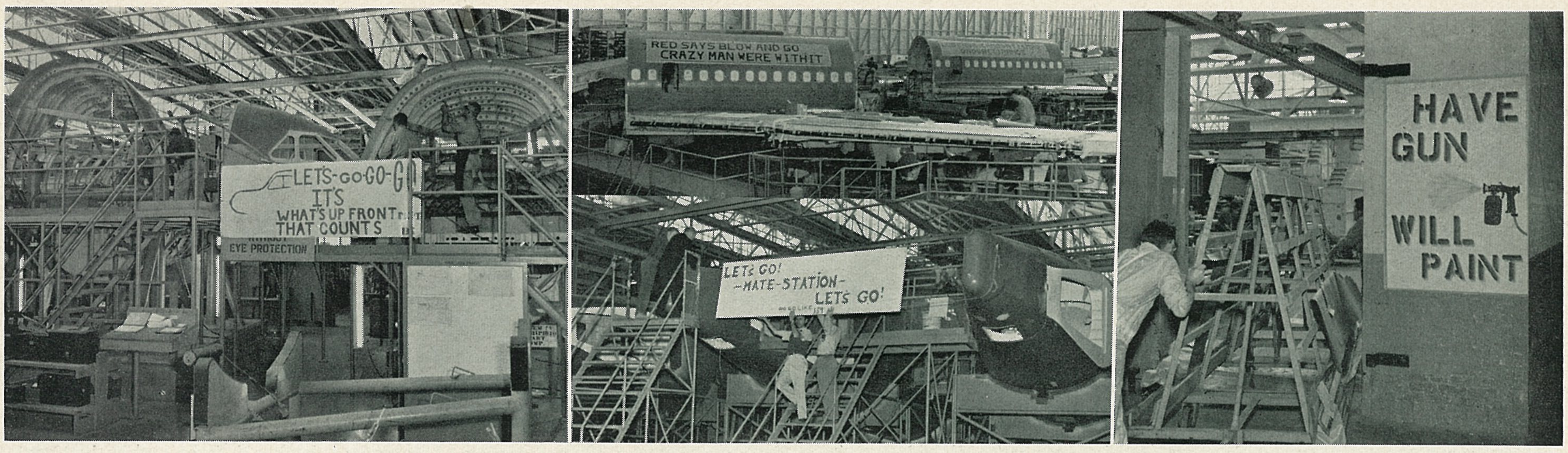
SAE to Tour Astro

Members of the Society of Automotive Engineers will be briefed on the Atlas program and tour Astronautics March 21.

A meeting and social hour will be held at the Sands Hotel at 6 p.m. followed by dinner at 7 in the Astro cafeteria. For information call John Schroepfer, BR-7-6450, ext. 416.



SUCCESS—B-58 escape capsule was successfully static-fired from second station of Hustler No. 2 this month in first such firing from airplane.



DRESSED UP—Spontaneous rash of signs appeared throughout San Diego factory recently, expressing new spirit of stepped-up activity. There was even one in Spanish, freely translated as "We Shall Build on Time—or Else." Signs were strictly departmental affairs, unorganized.

GD GENERAL DYNAMICS

General Dynamics Corporation
Published every other Wednesday by Convair Division

Convairiety

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SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.



880 TAILS—In field operations at San Diego, jet 880 tails with cloud formation in background make attractive design.

Dept. 7 Personnel Formally Transfer To GD/Electronics

Formal establishment in San Diego of the Military Products operating division of General Dynamics/Electronics occurred Monday, March 27.

Appointment of William Lawrence as general manager of the San Diego facilities of the division was announced March 21 by Kenneth M. Lord, vice president of GD/Electronics. Lawrence had been acting manager of Convair's electronics department.

Managers of major departments of the operating division reporting to Lawrence are H. L. Gates, manager of operations; H. L. Anderson, manager of quality control; W. E. L. Boyce, REINS manager; W. R. Rauth, manager of marketing; W. S. Stroud, manager of industrial engineering; Dr. Donald Wahl, manager of engineering; R. C. Smith, controller.

Some 860 persons have been transferred to the new operating division in San Diego. The great majority had formerly been in Convair SD's Dept. 7. Other Dept. 7 people have been transferred to Convair SD Dept. 6 to support those product lines retained by Convair.

Still another group formerly in the old electronics department, data systems, has been transferred to the GD/Electronics Information Technology Division in San Diego.

Personnel of the new Military Products operating division were assigned new employee numbers and issued distinctive badges (light green rim inscribed "General Dynamics/Electronics") March 27.

Although GD/Electronics is separately operated and has its own chain of responsibility, the new division will continue to share facilities with Convair San Diego. These facilities will be located in Bldgs. 4 and 51, the same as those formerly occupied by Convair's electronics department.

In addition, Convair SD will provide services for the new operating division in the fields of industrial relations, data processing, shipping and receiving.

The new operating division will continue the following key product lines formerly assigned to Convair electronics department: airborne radar, surface radar, infrared systems and related components.

Current activity includes production of the REINS radar system for North American Aviation's A3J all-weather Navy shipboard attack bomber.

As previously announced, the Military Products operating division of GD/Electronics will have autonomous operations in both Rochester, N. Y., and San Diego. Other operating divisions of GD/Electronics are Commercial Production Division and Telecommunications Division, Rochester; and Information Technology Division, San Diego.

Lawrence, general manager of the San Diego operation, joined GD in 1960 as director of operations for Stromberg-Carlson's Electronics Division in Rochester.

Previously, he was assistant general manager of Avionics and Automation Divisions of Bell Aircraft Corporation, Buffalo, N. Y. He has also been manager of manufacturing of Radio Condenser Corporation in Camden, N.

(Continued on Page 2)

Avensa, J.A.L. Raise Orders For Jetliners

Orders for all versions of Convair jetliners—880, 880-M, 990—now stand at 97 with recent announcements of additional purchases by Japan Air Lines and Avensa of Venezuela.

The Avensa purchase of a second Convair 880-M was announced March 21 in San Diego by C. Rhoades MacBride, president of Convair Division of General Dynamics Corporation, and at Caracas by Dr. Oscar Machado Zuloaga, president of Viasa, and Andres Boulton, president of Aerovias Venezolanas, S. A. (Avensa).

The Avensa 880-M will be used by the new, jointly-owned Venezuelan international airline, Viasa, which was formed with mixed capital by the Venezuelan Government and private enterprise.

Viasa is the "chosen instrument" of Venezuelan authorities to fly international routes previously served by Linea Aeropostal

(Continued on Page 5)

880-990 Acceleration Ups SD Employment

Convair SD operating division employment, moving steadily upward since the first of the year in response to acceleration of the 880-990 program, moved past the 19,500 mark last week.

Since early January there have been approximately 3,000 new hires, though the net increase in employment is about 2,000. Normal turnover plus retirees account for the difference.

Hiring for the most part has been in skilled categories, H. E. Pasek, employment manager, reported, with emphasis upon experienced aircraft assemblers. Job seekers may apply at either the Convair SD employment office or the Department of Labor, Columbia and F. The latter is screening applicants to be sure they qualify.

Convair SD employment off-site has shown a minor drop since the first of the year and stands now at about 735.

The force of expert manpower directed at the 880-990 program was further supplemented this month by the airlift of approximately 260 skilled aircraft men from Fort Worth operating division. They arrived in two groups, March 12 and 19, for a 60-90 day period.

For the most part, crews were brought in intact with their own supervision and assigned to the same shifts they worked in Fort Worth. They were brought in temporarily when it became apparent that personnel in these skilled categories were not available locally in sufficient number.

Classifications included field and service mechanics, developmental mechanics, structural me-

(Continued on Page 3)

Valley Chests Will Get $1,500

Convair SD Employees' Con-Trib-Club Committee approved $1,500 for Community Chests in Antelope Valley and $4,000 to a San Diego philanthropic group at its March 22 meeting.

North Antelope Valley Community Chest will receive $900. and South Antelope Valley Chest will get $600 on recommendation of the Antelope Valley Employees' Con-Trib-Club Advisory Committee.

Final approval was given $4,000 for the San Diego Society for Crippled Children Easter Seals campaign.

A framed "Certificate of Appreciation" was presented Con-Trib-Club in recognition of its support of Salvation Army activities, specifically the camping program for underpriviledged children and emergency relief grants to the Family Welfare department.

Non-Buyers of Savings Bonds To Be Contacted in Campaign

"Bonds now work to keep the peace."

In step with that theme, Convair San Diego will launch a U.S. Savings Bond drive in the plant April 17-21.

Those who presently do not purchase bonds by payroll deduction will be contacted during the campaign.

Convair SD bond buyers total exactly half of the plant population. Present purchasers will not be contacted. They are, however, encouraged to increase the amount of deduction for bonds at this time.

To facilitate matters, tab cards will be channeled through supervision to all non-buyers. All that is necessary is to fill the card out and indicate the amount of deduction.

Minimum deduction for hourly people is $1.25 per pay period;

(Continued on Page 2)



TOP TEAM—Checking chart are staff members of San Diego facilities of Military Products Division of General Dynamics/Electronics. Seated is William Lawrence, general manager. Standing, from left, are Donald Wahl, mgr. of engineering; W. E. L. Boyce, REINS mgr.; W. S. Stroud, mgr. of industrial engineering; R. C. Smith, controller; H. L. Gates, mgr. of operations; H. L. Anderson, mgr. of quality control. Not available when photo was taken was W. R. Rauth, mgr. of marketing.







ANNIVERSARIES—There was big crop of 25-year men at SD this month. In photo at left are A. R. Johnson, James F. Good, R. C. Loomis, San Diego manager, who made presentations, John F. Bryant, Rudolph O. Funke, John P. Strachan. (Latter received 30-year emblem.) Left center is Wilbur E. Dake and in right center are Adolph J. LeBeau and Robert E. Elo. In photo at far right are Tony C. Berardini, Loomis, Joseph A. Gliebe, Jacob E. Frichtel.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period March 16 through March 31.

Twenty-five-year: Dept. 4-0, W. E. Dake; Dept. 110, T. C. Berardini; Dept. 123, A. J. LeBeau; Dept. 142, R. E. Elo; Dept. 215, J. E. Frichtel.

Twenty-year: Dept. 3-3, Bernice A. O'Connell; Dept. 6, W. A. Ebel, Dell Fuller, V. J. Schack, A. L. Tylor, J. F. Woodall; Dept. 14-7, B. E. Smith; Dept. 15, H. J. Boetel, H. M. Bohmbach; Dept. 21-1, R. M. Montgomery; Dept. 31, H. G. Baumgarten, T. B. Laukkanen, J. M. McClendon; Dept. 44, J. L. Melanson, E. M. Vaile; Dept. 100, E. W. Schelske; Dept. 133, W. S. Rutherford; Dept. 142, O. F. Cross; Dept. 401, G. H. Hespe, J. N. Pasich.

Fifteen-year: Dept. 31, J. N. Anderson; Dept. 115, J. F. Kershaw; Dept. 148, G. G. Waring.

Ten-year: Dept. 1-31, Preston Jenkins; Dept. 3, Evelyn V. Carson, Gerald Vosburgh; Dept. 4, Annabelle M. Barrie; Dept. 6, H. J. Clausen, Sybil D. DiMatteo, A. C. Durson, D. L. Johnson, E. R. Meyers, J. M. Sawicki, T. W. Ochodnicky; Dept. 7, G. D. Alumbaugh, T. E. Cox, R. A. Davis, Idah E. Foster, Margaret S. Hunt, L. C. Landry, Jacqueline S. Robbins.

Dept. 11, F. S. Chambers Jr.; Dept. 14, Eva C. Rose, Norma Simonds, Sarah E. Weller; Dept. 15, I. C. Blackwood; Dept. 21, A. L. Gitchel, J. B. Richardson, J. W. Sunder; Dept. 25, J. S. Brown, E. D. Wood; Dept. 31, J. J. Katich, W. O. Quintero; Dept. 34, Dorothy C. Whitty.

Dept. 44, Agnes W. Greel, Elnora L. March, Virginia S. Rohr, Mollie A. Schadel; Dept. 91, Ruth M. Cuzner, P. D. Holmes, Dorris P. Lach, Barbara W. Vincent; Dept. 98, Edna H. Reisweber; Dept. 101, F. G. Herrera, W. M. Watson; Dept. 115, Frieda T. Barlow, Ruth S. New; Dept. 116, J. L. Cavender, Helen L. Duehring.

Dept. 129, Norma B. Goodman, Patricia A. Kerns, Amelia M. Miller, Sarah S. Steiner; Dept. 133, Vernetta W. Jewell; Dept. 138, Lucinda L. Datin, Dee Duran Jr., B. G. Stoelting; Dept. 140, Adelia H. Lavis; Dept. 141, M. R. Sandlin; Dept. 142, J. A. Cabral; Dept. 143, Erma Heredia; Dept. 145, H. G. Babcock, Maurice Simoneau; Dept. 146, Henry Knittel, T. G. Turner; Dept. 148, P. L. Newlin.

Dept. 160, Clarence Newlin; Dept. 171, K. R. Hoppe, Vera S. Templeton, W. W. Wetzell; Dept. 179, Barbara L. Wakefield; Dept. 180, Agnes P. Krupicka; Dept. 188, Emmanuel Greinier, K. W. McColloch; Dept. 192, Pauline B. Cook; Dept. 197, G. A. Gibbons, Estelle G. Gibson, G. E. Mowers; Dept. 204, Jesus Sotelo; Dept. 206, Patricia M. Fisher; Dept. 215, A. E. Des Rosiers, Doris R. Espinoza, Dorothy E. Grier; Dept. 216, E. E. Nelson, Mildred P. Timmons.

Dept. 218, W. L. Kinney, Betty B. Mallard, A. B. Olney; Dept. 223, V. H. Wood; Dept. 232, W. T. McDonald; Dept. 233, Elvena H. Langford; Dept. 249, Lottie K. Shumaker; Dept. 288, Harriet B. Bloodgood, Viva P. Hunt; Dept. 292, Betty E. Johnson, Lillian B. Wray; Dept. 400, J. G. Adrian, Vernice D. MacKenzie, Mabel B. Myrann; Dept. 401, C. L. Kastriner, Reidar Larsen, Edison Leep.

PALMDALE

Ten-year: Dept. 321-1, C. F. Wilkerson.

Deaths

SAN DIEGO

HOLTON—Claude R., 44-3. Died March 20. Survived by his wife, Louise; one sister; two brothers.

JONES—Willard Lee, Dept. 101. Died March 18. Survivors include his wife, Cora M.; three sons, La Verne, Willard, and Donald; and a daughter, Betty; two stepdaughters; two sisters; 16 grandchildren.

OSLUND—Henry W., Dept. 14. Died March 14. Survived by wife, Anna; three daughters, Mrs. Adeline Shorey, Mrs. Florence Kinnes, Mrs. Betty Lou Zachary; two sisters; one brother; and eight grandchildren.

Promotions

SAN DIEGO

Promotions to or within supervision effective March 13.

Dept. 6, Engineering: To modification group engineer, J. D. Chapman. To research group engineer, D. W. Conover. To aero group engineer, R. R. Lanflisi. To engineering planning and estimating asst. supervisor, T. W. Ochodnicky. To reproduction asst. supervisor, D. R. Pierce. To engineering administration supervisor, B. H. White.

Dept. 8-4, Systems and Procedures: To systems and procedures supervisor, P. R. Yates.

Dept. 21, Transportation Operations: To transportation asst. foreman, D. G. Kephart, H. H. Walters.

Dept. 25, Plant Engineering: To asst. foreman, J. W. Fassel, W. T. Toon.

Dept. 31, Experimental: To foreman, E. B. Askey, C. S. Strand, B. N. Waite. To asst. foreman, R. S. Bryan, B. Luffe, J. M. McClendon.

Dept. 34-5, Material: To purchasing agent, P. G. Peninger.

Dept. 44-3, Material Control: To material control general supervisor, J. L. Richman.

Dept. 97, Data Processing: To tabulating general supervisor, C. L. O'Rourke. To tabulating supervisor, S. Weiner. To tabulating asst. supervisor, L. G. Mauseth.

Dept. 100, Factory Manager's Office: To foreman, G. O. Couchman.

Dept. 101, Sheet Metal: To foreman, R. D. Gowdy.

Dept. 115, Machine Shop: To foreman, S. T. Krebs, S. Penziul. To asst. foreman, R. E. Prafke, W. Ross.

Dept 116, Electric Bench: To foreman, M. Alianelli.

Dept. 119, Metal Bond Fabrication & Assembly: To foreman, G. C. Allin, W. H. Carson, R. W. Talmage.

Dept. 120, Jet Transport Bench Subassembly: To asst. foreman, G. M. Cain, W. C. Stewart.

Dept. 123, Welding & Assembly: To asst. foreman, O. D. Phillips.

Dept. 129, Trim: To foreman, E. E. Carpenter. To asst. foreman, W. L. Lawson.

Dept. 136, Jet Transport Beltframes & Underwing Canoe: To foreman, E. E. Miller.

Dept. 137, Jet Transport Aft Fuselage Structure, Overwing Barrel, Lower Aft Canoe, Aft Tail: To foreman, C. E. Rice.

Dept. 140, Pod & Pylon Assembly: To foreman, L. E. Brown, L. C. Hare, W. P. Moore.

Dept. 141, Jet Transport Delivery Preparation: To foreman, F. M. Applegate, J. P. Corrao. To asst. foreman, N. B. Bezio, R. E. Bryan, R. C. Kinder, R. B. Maddox, F. D. Meadows, T. M. Miller, L. E. Reich, L. E. Starkey, J. D. Watson, P. D. Wayman, J. R. Weaver, F. N. Wilson, E. T. Wold.

Dept. 142, Jet Transport Wing Skin & Stringer Panel Assemblies: To asst. foreman, F. A. Gordon Jr.

Dept. 146, Jet Transport Wing Primary & Wing Mate: To foreman, D. E. Knapp Jr., J. T. Mitchell. To asst. foreman, F. W. Anderson, J. P. Kany, J. H. Sargent, D. M. Sullivan.

Dept. 148, Jet Transport Major Mate: To foreman, D. E. Leinweber. To asst. foreman, M. G. Fain, R. A. Garner, T. Q. Melton.

Dept. 160, Jet Transport Final Assembly: To foreman, L. R. Imbimbo. To asst. foreman, O. J. Bazoon Jr., H. L. Berry, P. W. Byrd, G. P. Gerardy.

Dept. 170, Electronics Installation: To asst. foreman, R. J. Moore.

Dept. 171, Field Operations: To foreman, C. D. Mangels, R. Niski. To asst. foreman, L. A. Majel.

Dept. 179, Jet Transport Post Production Service: To foreman, G. M. Zelno.

Dept. 180, Proofing Mockup: To asst. foreman, R. K. Hamilton, J. R. Tooth.

Dept. 188, Inspection, Plant 1: To inspection general supervisor, E. Caldwell. To inspection supervisor, G. S. Durland, G. E. Forbes, R. D. Johnson. To inspection asst. supervisor, A. N. Ennis, J. A. Baker, A. J. Gagliardo, W. K. Phillips, J. D. Sanders, R. Yturralde.

Dept. 215, Machine Shop: To foreman, S. Brown, H. L. McDowell. To asst. foreman, J. H. Blake, B. R. Cummings.

Dept. 218, Sub-assembly: To foreman, H. C. Griffin.

Dept. 271, Model 8 Field Operations: To asst. foreman, F. G. Werner.

Dept. 288, Inspection, Plant 1: To inspection supervisor, B. A. Buffat. To inspection asst. supervisor, F. R. Roberts.

Dept. 292, Manufacturing Control, Plant 2: To M/C asst. foreman, C. A. Walling.

PALMDALE

Dept. 321-1, Field Operations: To asst. foreman, A. G. Kriesel.

Personals

SAN DIEGO

To the blood donors who helped me through my recent illness, and to the Convair friends who sent flowers and cards, I wish to express my sincere appreciation.

William Dust, Dept. 6.

* * *

I thank all my Convair friends, especially those in manufacturing control (Dept. 192), for their thoughtfulness, and the cards, flowers, and messages of sympathy at the death of my father, George C. Campbell.

D. K. Campbell, Dept. 192-5.

* * *

I wish to thank my Convair friends in Depts. 129 and 134 for their many kindnesses at the time of my father's death.

Sue Johnston, Dept. 134.

* * *

My sincere thanks goes to all of my Convair friends in Dept. 204 and 223 for the sympathy and flowers at the death of my sister, Gladys Henigar.

G. A. Golding,
Dept. 223, Plant 2.

* * *

We wish to express our thanks to our Convair friends for the coffee-maker and toaster given us as wedding gifts. We want them all to know how much we appreciate their kindness.

Mr. and Mrs. Gary Monroe,
Dept. 7-70.

* * *

We wish to express our sincere appreciation to all of our Convair friends for the many kindnesses, cards, and flowers received during the illness and death of our husband and father, Arthur Thursam.

Mrs. Anna Thursam and Family.

Retirements

SAN DIEGO

BODENHAMER—Alton L., Dept. 25-9. Seniority date Oct. 13, 1950, retirement effective Jan. 4, 1961.

KARAFFA—John, Dept. 101. Seniority date June 11, 1947, retirement effective March 10, 1961.

FEHRENBACHER — James H., Dept. 223. Seniority date May 11, 1954, retirement effective March 17, 1961.

LIEGL—John Sr., Dept. 400-6. Seniority date Dec. 7, 1950, retirement effective March 8, 1961.

LOUDON—Clifford L., Dept. 7. Seniority date Aug. 22, 1951, retirement effective March 3, 1961.

McHUGH—Alice M., Dept. 98. Seniority date March 31, 1951, retirement effective Jan. 17, 1961.

NELSON—Charles E., Dept. 25-2. Seniority date April 21, 1952, retirement effective March 8, 1961.

PINTA—Andrea, Dept. 25-9. Seniority date Sept. 22, 1949, retirement effective March 10, 1961.

PRATTINI—Peter L., Dept. 101. Seniority date Aug. 7, 1950, retirement effective March 10, 1961.

WHITCOMB—Lila H., Dept. 216. Seniority date Oct. 27, 1950, retirement effective Feb. 24, 1961.

Births

SAN DIEGO

BEASON—Son, Marion Jr., 6 lbs., 4½ oz., born March 13 to Mr. and Mrs. Marion Beason, Dept. 135.

RIOS—Daughter, 7 lbs., born Feb. 24 to Mr. and Mrs. M. Rios, Dept. 204, Plant 2.

STRATTON—Son, Mark Allan, 6 lbs., 2 oz., born Feb. 22 to Mr. and Mrs. R. Stratton, Dept. 400.

Savings Bonds Drive Slated

(Continued from Page 1)

the minimum for flat-salaried personnel is $2.50 per pay period.

Participation in the program is optional for all persons.

May 1 of this year will mark the 20th anniversary of Defense Bonds and Savings Bonds. In that time two billion Series E bonds have been purchased. Presently eight million Americans purchase bonds on the payroll savings plan.

Rate of interest paid is 3¾ per cent to maturity. When mature bonds are cashed, you receive one-third more money — $4 for every $3 you put in, guaranteed.

★ Convairiety ★

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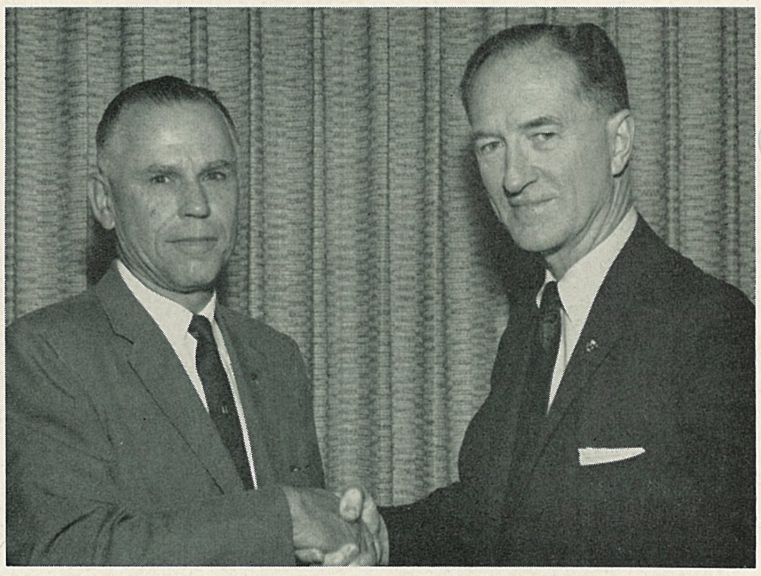
SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Fred Bettinger, news editor; Grayce Fath, Helen Pemberton.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.



THREE DECADES—R. C. Sebold, Convair vice president-engineering, left, is shown congratulating C. R. Irvine on 30th anniversary.

Dept. 7 Personnel Formally Transfer

(Continued from Page 1)

J., from 1953 to 1956. Earlier, he had been manager of operations at Magnavox Corporation in Greeneville, Tenn., and plant manager for General Electric Company at Syracuse, N. Y. Lawrence is an engineering graduate of Pennsylvania State University and a licensed professional engineer in New Jersey and Pennsylvania.

The appointment of Gates as manager of operations was also announced March 21. Gates joined GD in March, 1960, as manager of manufacturing in Stromberg-Carlson's Electronics Division. For three years he was manager of manufacturing engineering for Bell Aircraft Company and earlier held supervisory positions with General Electric in Syracuse and Utica; the Easy Washer Company, Syracuse; and Auburn Spark Plug Company, Auburn, N. Y. He attended Syracuse University.

As manager of industrial engineering, Stroud will be responsible for facilities control, office services, master scheduling, long range planning and management reporting. He became chief of electronics administration at Convair SD in November, 1959, after serving as director of the F-108 wing program in which position he reported directly to the Convair vice president and SD manager. Previously, he was program control administrator for all Convair SD programs. He has been with Convair 22 years.

Smith, the new controller, a Texan by birth, received his BCS degree from the former Balboa University in San Diego. He joined Convair General Office in March, 1955, as senior auditor, later became executive assistant to the director of auditing. In August, 1959, he transferred to GD corporate office as resident internal audit manager. Prior to joining Convair, Smith was associated with Rohr Aircraft Corporation as supervisor of auditing.

Boyce assumes his position as REINS manager after serving as Convair SD chief electronics project engineer since fall of 1959. A native of Cleveland, Ohio, he received BS and MS degrees in engineering physics from Ohio State University. He joined Convair in January, 1957, as a senior research engineer and has since held positions of design specialist, research group engineer and senior electronics group engineer.

Dr. Wahl, manager of engineering for the new division, was born in Newark, N. J., received BS and Ph.D. degrees from M.I.T., Cambridge, Mass. Before joining the electronics department at Convair SD in June, 1960, he had been assistant to the president of EPSCO, Inc., Cambridge. Previously he had been associated with Avion Division of ACF Industries, Paramus, N. J., and Atomic Energy Division, Sylvania, Bayside, N. Y.

Anderson, manager of quality control, has been in Convair quality control department since 1947 and has held positions of supervisor, general supervisor and chief of inspection at Convair's Palmdale facility. For the past nine months he has been chief of quality assurance electronics for Convair.

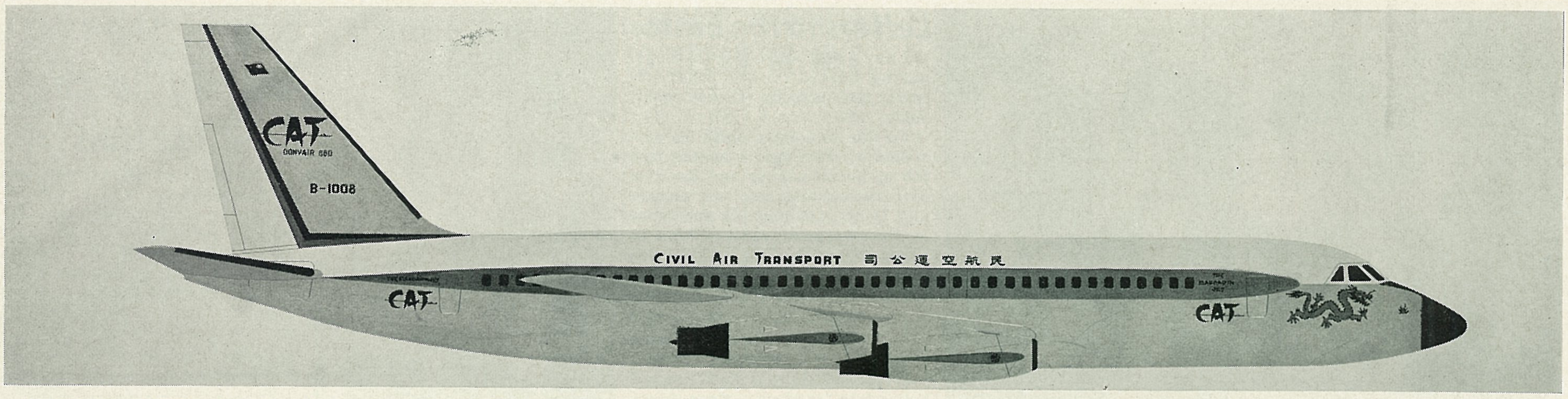
Rauth, manager of marketing, received his BSEE degree at Bucknell University and has had 14 years experience in test research and development for the Ford Instrument Company, a division of Sperry Rand. Prior to joining Convair, Rauth was project engineer for the RS12 and RS14 Radar Simulators for Fleet Air Defense Training Center at San Diego. Rauth joined Convair SD in 1958 and has been chief of electronics marketing.

Delta Route to SD From Fort Worth Will Begin in June

Delta Airlines, operating a fleet which includes nine Convair 880s, will open new transcontinental air service at Lindbergh Field in San Diego June 11.

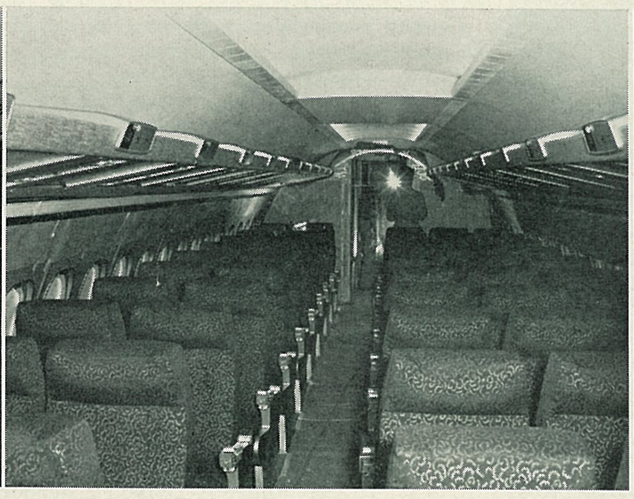
The Civil Aeronautics Board recently gave both Delta and National Airlines the right to extend their service into San Diego.

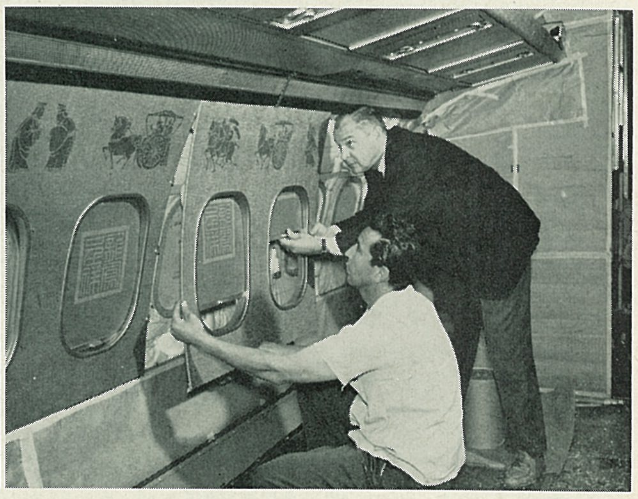
Delta was given permission to extend service from Fort Worth to Los Angeles and Long Beach by way of San Diego and to San Francisco and Oakland from Fort Worth by way of Las Vegas.



ORIENTAL QUEEN—Here's what paint job of Civil Air Transport's Convair 880-M will look like. No cut can do it justice, but unusual features include Chinese dragon on forward fuselage and Republic of China flag on tail. Cut was made from drawing; the plane itself will not be painted until shortly before delivery schedule this June. First 880-M will ply over water between Formosa home base and Korea, Japan, Okinawa, Philippines, Hong Kong, Thailand.







EXOTIC—Interior furnishing of Convair 880-M purchased by Air Asia Company Limited is virtually completed. Color scheme uses black, red, gold, bronze and variations. At left David B. Gluskin, special assistant to president of Air Asia, watches Virginia Stewart (Dept. 141) secure scroll work for simulated Chinese moongate. At right Gluskin inspects paneling being installed by Raymond Figueroa (Dept. 148). Center photo was made exactly one week after other two, shows Canton black seats in coach area. Scenes depicting travels of Confucius can be seen on side walls in right shot.

FW Crews Airlifted To Speed 880-990

(Continued from Page 1)
chanics, electricians, modification and maintenance mechanics and some inspectors. The bulk were assigned to Dept. 141 (modification) and to final assembly. In most cases the FW crews were kept as separate units, though some specialists were meshed in with San Diego crews.

Flown in by chartered airplanes, the groups were met at the airport by Factory Manager F. H. McLaughlin, and Supt. Emmett Williams, who coordinated the move, and J. K. Field, chief of employee services at SD. Special buses transported them to motels in the Pt. Loma-Shelter Island area. Early the day after arrival they attended a two-hour orientation lecture at Plant 1 which included a description of the 880 and 990 by R. H. Brown, proof and mockup foreman, and an outline of the general tasks involved. The indoctrination program was arranged by R. H. Nall of educational services and includes special classes begun March 17 to indoctrinate FW men in SD methods regarding blueprints and planning paper.

Fort Worth crews appeared to be moving smoothly into the San Diego operations. Harry Rumbaugh, field operations superintendent, commented favorably on the high caliber of personnel.

Williams said that everything possible was being done to accommodate the visitors. They are being paid out of Fort Worth and first paychecks arrived promptly for delivery through supervision March 17.

Wives of some of the FW men will be driving family cars to the West Coast for the return trip to Fort Worth, Williams added.

Plastics, Trim Dept. Divided

Plastics and trim (Dept. 129) at Convair San Diego has been split into two separate departments with trim retaining the original department number. Plastics is now Dept. 128.

Lee Stamper is general foreman in charge of both, as well as Dept. 119, metal bond fabrication and assembly. Assistant general foreman, nights, is M. F. Link.

Reporting to Stamper as foreman of Dept. 128 is E. E. Carpenter; M. B. Fuhrmann, foreman of Dept. 129; G. C. Allin, foreman, days, of Dept. 119 and W. H. Carson, foreman, second shift.

Berthelet Speaks Before Educators

J. T. Berthelet, Convair SD systems and procedures supervisor, was panel speaker during the 1961 convention of California Business Educators Association held last weekend in San Diego.

Panel discussion was centered on demands on business education by increasing office automation methods with a review of overall procedural developments and subsequent changes necessary in high school and college programs.

Exotic Interior Design Features Luxury 880-M

Travelers boarding Civil Air Transport's Convair 880-M will be entering a world of exotic Chinese culture.

Styled by the customer, the interior of The Mandarin Jet features seats upholstered in Canton black material. Partitions are teak flexwood, painted mandarin red with gold wipings in the grain and gold with black wipings.

Class dividers are ringed by simulated Chinese moongates laced with gold scroll work. Bronze and gold dragons, lion heads and Phoenix birds appear as crests in the interior.

On side walls above the windows are silhouettes in bronze silk screen, symbolic of the travels of Confucius. On each glare curtain (window shade) are the Chinese characters signifying "health, wealth and prosperity."

Vertical ordnance signs are specially designed, flash on in both English and Chinese.

To give some indication of the subtle color characteristics of the interior, "gold" alone comes in three hues: Siam gold, Nakom gold and Royal Tablet gold.

Dr. W. S. Hay of FW Speaks on Bonding

Dr. W. S. Hay, FW manufacturing research and development coordinator, spoke at the third annual production institute of the American Society of Tool and Manufacturing Engineers March 27-28 at Wichita, Kansas.

Mandarin Jet Will Fly Republic of China Flag

Convair SD's first 880-M delivered to a customer this summer will go into service as "The Mandarin Jet" with Civil Air Transport, the flag carrier of the Republic of China.

Purchased by Air Asia Company Limited, the interior of The Mandarin Jet will be a blend of luxurious gold and black decor accented by Chinese characters in curtains, fabrics and paneling.

The fleet 880-M will bring cities on CAT's over-water routes "within minutes" of flying time from each other.

The airline's operations connect Korea, Japan, Okinawa, Taiwan (Formosa), Philippines, Hong Kong, and Thailand. CAT domestic operations link the major cities of Taiwan by daily flights.

Stewardesses who will be flying on board The Mandarin Jet have been hand picked. In addition to the usual exacting requirements, the girls must speak English, two or more Chinese dialects, or one Chinese dialect and another foreign language.

The Air Asia airplane was rolled out of Bldg. 3 March 17 to enter a program of ground fuel calibration tests to check the center section fuel system.

After tests are completed about April 1, calibration instrumentation will be removed and interim flaps on the plane replaced with production versions.

After The Mandarin Jet completes its stay in field operations, Federal Aviation Agency will conduct a conformance inspection test May 2-3.

Flight testing will then start involving both Convair and FAA crews, with tests especially concerned with those items peculiar to the Air Asia plane as the first complete craft in its class.

The Mandarin Jet is the first 880-M which has three bay fuel tanks in the center section, to give the airplane an increased fuel capacity.

Also slated for testing in the program are the initial installations of the Doppler Navigation System and Bendix X-Band weather radar. Because the plane is the first 880-M with a completely-furnished interior, other tests are scheduled for acoustics, radio noise and ventilation.

Delivery of the airplane is expected in early June.

Art Thursam Dies, Veteran of Convair

Art Thursam, one of the oldest employees of Convair in length of service at the time of his retirement three years ago, died March 17 in a San Diego hospital.

Thursam, 69, had joined Consolidated in Buffalo, N.Y., the fall of 1931. He came to San Diego with the first Consolidated contingent and helped lay out the machine shops at Plants 1 and 2. At the time of his retirement in December, 1957, he was assistant foreman in Plant 2 tooling.

He is survived by his wife, Anna; two daughters, a sister, five grandchildren, and two great-grandchildren.







GREETINGS, FRIENDS—Crews from Convair Fort Worth, flown to San Diego to lend hand in accelerated 880-990 programs, are welcomed at Plant 1. At right Foreman R. H. Brown and Supt. Emmett Williams address group on first day at SD. In center Foreman Glenn Baker explains tasks in fuselage of 880.



LOOKING BACK—Astro Divers and wives examine ancient Indian artifacts recovered from sea off La Jolla Shores. Examining hollowed out stones which served as "metates" are Mr. and Mrs. Jim Hodges, and Mr. and Mrs. Herb Boynton.

Artifacts of Ice Age Recovered From Sea by Astro Skin Divers

Traces of a world that existed thousands of years ago have been brought "back" recently by members of Astro Divers, CRA skin diving club at San Diego.

On recent diving expeditions in 30-40 feet of water off La Jolla Shores, divers Jim Hodges and Herb Boynton, CRA commissioner, have recovered a number of ancient artifacts belonging to an Indian tribe which inhabited that region long before the present civilization.

Recovered to date are a variety of stones hollowed out on one side, apparently for use as bowls, arrowheads and "metates," (bowls used for grinding grain).

James Moriarty, Scripps Institution of Oceanography archaeologist who examined the finds, stated they belonged to a tribe of La Jolla Indians which flourished near the end of the last Ice Age. When the polar ice cap melted during that period, sea level raised 40 to 50 feet, submerging the articles where they lay until discovered by the divers.

The artifacts have been dated by the Carbon 14 method as ranging from 4,000 to 7,000 years old.

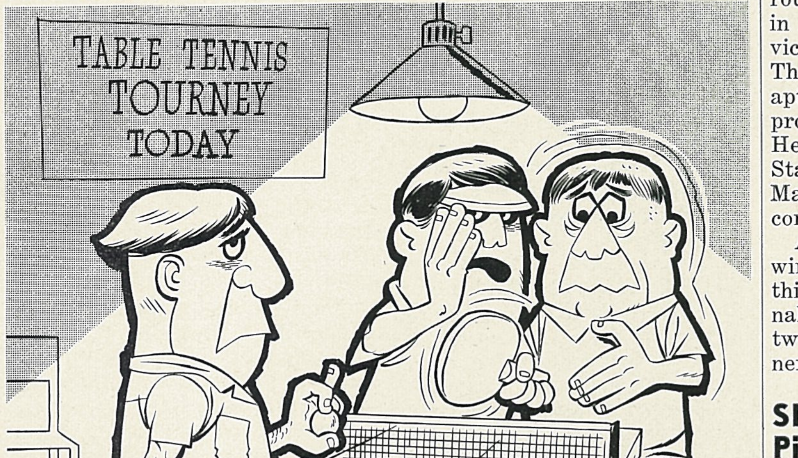
Brig. Gen. Joseph Gill Appointed to Maj. Gen.

Brig. Gen. Joseph E. Gill, USAF, special assistant for site activation, Ballistic Missiles Center (BMC), has been notified of his appointment to the temporary grade of major general.

Gen. Gill assumed duties at BMC last September.

He is a graduate of the U. S. Military Academy, the Armed Forces Staff College, and the Industrial College of the Armed Forces. He holds a master's degree in civil engineering from the University of Michigan.

Is It News?
Call Convairiety



"Watch this guy—he's a natural born player."

Illustrator's Cartoon at Fort Worth Spoofs Table Tennis—Look Carefully

Willard Ballow, FW engineering illustrator, won first place in the Fort Worth Public Library's annual "Spring Tonic" cartoon contest.

His entry spoofs table tennis, at which Ballow is a champion. He recently won a city-wide tournament in Weatherford, where he lives with his wife and three young daughters.

Ballow's cartoon was judged best of 61 entries. It will be on display with the other entries at the library's art gallery through tomorrow.

Ballow, Dept. 6-5, has been a Convair illustrator 10 years.

Letters to the Editor

I am a new start at San Diego, having worked for two other aircraft and missile firms previously.

I'd like to congratulate all personnel at SD Plant 1 on the fine job of housekeeping and the fine cooperation one receives, especially Depts. 146 and 148 and those in the blueprint central files in Bldgs. 2 and 3. The plant seems like one big family, everyone trying to help each other to manufacture quality airplanes.

New Start.

* * *

I cannot tell you how much I appreciate receiving **Convairiety** and how grateful I am for this thoughtful provision of the Company for whom I worked continuously the past 20 years . . .*

I really loved Convair, its people and its work . . . Convair and its supervision have been good to me and mine . . . having provided us with the necessities of life, the education of our children and the ability to lay away a little for a rainy day . . . But I do miss all of my wonderful friends. A closing word to all now at Convair: Don't fail to appreciate Convair—don't fail to appreciate your job—don't fail to appreciate your supervision, for you may be sure there isn't any other that is comparable in tolerance and quality . . .

A. A. Perry
3751 Marlborough
San Diego 5, Calif.

*Convair makes a practice of placing retired employees on **Convairiety** mail list.

* * *

I do wish to thank you on receiving my first **Convairiety** following retirement. It really is appreciated to know that I am not entirely disconnected from the plant and my friends of 10 years.

Paul Tarditi,
6816 Central Ave.,
Lemon Grove, Calif.

96 Apply For Scholar Award

Thirty contestants for 1961 Convair San Diego Management Club scholarships survived first-round elimination recently, announced Keith Blair, chairman.

The 30 were chosen from the largest field of entries ever to apply for the Management Club awards—96 Convair SD sons and daughters originally applied.

Three boys and three girls emerged as finalists from second-round competition held March 25 in Bldg. 19, explained Hal Mayer, vice chairman and publicity head. This phase of the contest was an aptitude type test plus an impromptu essay, conducted by Dr. Herman Roemmich of San Diego State College. Members of the Management Club scholarship committee assisted.

Announcement of second-round winners will be made the end of this month, said Mayer, with final judging and selection of the two top winners and four runners-up to be April 19.

SD Lensman Showing Pictures in Exhibit

L. W. Rutledge of the Convair SD still photo lab is numbered among exhibitors in the Professional Photographers Association of San Diego County display at the SD City Library.

Rutledge, president of the organization, has two entries, both of small children, in the display of 53 photos showing the "Seven Ages of Man." The exhibit is open to public until the end of March on the second floor library gallery.

FW Welding Display Shown For College

A welding display from FW's Dept. 23 was a highlight of the People-Education-Progress show at Arlington State College March 17.

Dave Hoban, manufacturing research engineer, and R. E. Key, senior design engineer material and processes, represented Convair, which co-sponsored exhibit.



DEPUTY — Convair Pomona's Carol Schmutz (Dept. 13) is shown in uniform as reserve deputy sheriff.

Exciting

Dep. Sheriff Duties Spice Leisure Time

A newspaper article which stirred her imagination has led to an interesting—and at times, exciting—sideline career for Convair Pomona's Carol Schmutz (Dept. 13).

"Several years ago I read an article about the San Bernardino County Sheriff's reserve force," Mrs. Schmutz said. "I've always enjoyed working with people—that's one reason why I like my job as a timekeeper at Convair—so I applied for a position on the force, and was accepted."

That was in 1956. Today she is one of about five women on the reserve force. She is a regular deputy sheriff, on call at all times, but she serves without pay. She even provides her own uniforms, handcuffs and weapons. She meets with other part-time deputies once a month for training.

She is frequently called out to serve at public gatherings, and customarily takes a week of her vacation each year to serve at the San Bernardino County Orange Show, where she is in charge of policing the professional show area. She also is frequently called to the Ontario sheriff's sub-station to search female prisoners, or to perform temporary matron duty when female prisoners are awaiting transfer to the county jail in San Bernardino.

"Most of these calls are at night, when a regular matron is not on duty," she said. "I never know what to expect, except that the work will be interesting."

Mrs. Schmutz, who has been with Convair Pomona since May, 1954, plans to remain with the sheriff's force "as long as they'll have me."

Film to Show 'Easy to Reach' B-58 Controls

Consideration for the men who fly the B-58, as well as for the effectiveness of the airplane, go into design of the aircraft.

That's the theme of a movie being produced by Convair FW's motion picture section, titled "Human Factors in the B-58." The movie will run about 26 minutes, according to Dave Cazalet, project director.

One of the "stars" of the movie is the permanently-enshrined "City of Fort Worth," the B-36 at Carter Field, permanent memorial to those who built and flew B-36s. The movie will show how B-36 crewmen operated their instruments under comparatively "awkward" circumstances.

Of necessity, a lot of reaching for panels and instruments was required in the Peacemaker. Some controls were overhead.

By contrast, the movie will show the virtual "fingertip" controls on the B-58, and other "human factor" improvements, such as indirect lighting of the panels, eliminating glare.

Neal Slayton, who logged an estimated 1,000 hours during B-36 production days, portrays a pilot in the movie. Other cast members include Robert Bruce, co-pilot; Nick Mertes, flight engineer; R. O. Garlington, another B-36 veteran who logged 3,500 hours, K systems operator; and Earl Miller, camera man.

Jerry Ratliff and Erskine Gilbert wrote the script.



CONTRAST — Neal Slayton, FW flight test, shown in cockpit of B-36. Shots such as this will be included in movie to illustrate, by contrast, great advances achieved in B-58's convenient control system.



ON TOUR—Pictured during tour of SD factory, inside and out, are, from left, Joe Famme, SD assistant manager-operations, Edward J. Williams, General Dynamics vice president-manufacturing, C. Rhoades MacBride, General Dynamics executive vice president-operations now directly in charge of Convair operations, and SD Factory Manager F. H. McLaughlin.



MARKED—Day-shift women inspectors, all assigned to Plant 2 electric bench area at Convair SD, sporting new bright red identification headbands, are, left to right, (front row) Betty Snyder, Lena Royalty, Dixie Bohannan, Leona Baker, Betty Cogburn, Edna Williams, (back row), Bertha Edmondson, Dorothy Doren, Virginia Smith, Ruby Dean.

Headbands Pinpoint Inspectors In Plant 2 Electric Bench Dept.

Women inspectors assigned to Convair SD electric bench operations at Plant 2 got together and came up with their own means of identification.

Now all 15—10 on day shift, and five on nights—are easily spotted by perky red headbands labeling them as inspectors.

R. V. Brunner, Dept. 216 foreman, said that now inspectors can be picked out quickly from the many other women workers in the department.

"Often it has been a problem to locate an inspector among the other women, all dressed alike (there are 120 women in Dept. 216 on days and 40 on nights)," he explained. "Getting an inspector when she's needed helps speed our work and the headbands are making it a lot easier."

T. W. Brotherton, inspection general supervisor, said that other means of identification have been used in the past without too much success but that the bright red bands seem to be solving the problem. "It was the girls' own idea, and it seems to be working better than anything we've tried," he said.

Avensa, J.A.L. Boost Orders

(Continued from Page 1)
Venezolana (LAV) and Aerovias Venezolanas, S.A. (Avensa).

The Convair 880-Ms purchased by Avensa and transferred to Viasa will seat 93 passengers—12 in a forward lounge, 32 in a four-across first-class section, and 49 in a five-across coach area. The airplanes will be equipped with three galleys, one aft and two forward. They will have full provisions for over-water flights.

Viasa will use the 615-mile-an-hour jets on such routes as Caracas-New York, Caracas-Miami and New Orleans, Caracas-Bogata-Lima, and other Caribbean routes.

Also purchased last month were two additional 880-Ms by Japan Air Lines, bringing its total 880-M fleet on order to five.

The two 880-Ms just ordered by J.A.L. will be delivered in May 1962. Announced Convair 880-M orders now total 17. In addition to Avensa and J.A.L., 880-M customers include Air Asia Company Limited, Alaska Airlines and Federal Aviation Agency (to be used in its own jet transport training program).

Handling sales negotiations with Avensa Airlines in Caracas was A. W. Abels, Convair export sales manager. The Japan Air Lines negotiations took place in Tokyo. Convair representatives on hand were K. C. Gordon, J. H. Graves Jr., assistant managers-commercial sales; and R. F. Conley, assistant to director-contracts.

Airplane delivery activities at Convair San Diego are continuing to accelerate.

By the end of this week 28 jet-fast Convair 880s will be flying scheduled routes across the United States.

Airplanes Nos. 26 and 33 are slated for delivery to Trans World Airlines this week, bringing TWA's 880 fleet to a total of 13. Nine 880s are in operation with Delta Airlines while Northeast Airlines has six of the jet transports in service.

Convair Speakers Plan Installation And Ladies' Night

Newly-elected officers of Convair Toastmasters Club No. 457 will be seated at a joint installation dinner and Ladies' Night Saturday (April 8) at the Town and Country Hotel, Mission Valley.

Ceremonies will combine installation of officers for Convair and Naval Training Center groups with William Loerke, District 5 governor, doing the honors.

Ken Samples of Dept. 6, Convair SD, will succeed Andrew Gormish (Dept. 6) as president of Convair Toastmasters. Educational vice president is Till Schaefer (Dept. 6); administrative vice president, Ray Sodomka of Astro tooling; secretary, John Belanich, Astro engineer; treasurer, Hans Frei (SD-Dept. 6); and sergeant at arms, William Szabo, Astro tooling.

Guests are invited to the installation affair with cocktail hour at 7 p.m., dinner at 7:30. Tickets are $3.50 per person. Reservations must be made by April 5 through Don Quinn, ext. 1264, or Gormish, ext. 2272, both Plant 1.

New Space Course Of Six Sessions To Begin April 24

Registration is open now for a new course entitled "Space Environments," through Convair SD educational services.

R. F. Rolsten of SD materials technical group will instruct the six one-hour sessions which begin April 24 at Plant 1, and continue through May 29.

Material to be covered includes an introduction with general description of properties of the atmosphere, space radiation and its effects, extraterrestrial gases and solids, thermal environment, and planetary environments of the moon, Venus, and Mars.

Classes will be held each Monday, 4:30-5:30 p.m. Meeting place will be determined by the number enrolling.

All Convair people interested in taking the course are asked to send an AVO to L. J. Goldsmith, educational services, Room 378, Bldg. 51, zone 6-121, before April 7.

CONVAIR ENGINEERS TO SPEAK IN NYC

Several Convair engineers from Fort Worth, Astronautics, and Convair San Diego will present papers at the national aeronautic meeting of the Society of Automotive Engineers, Inc., in New York City April 4-7.

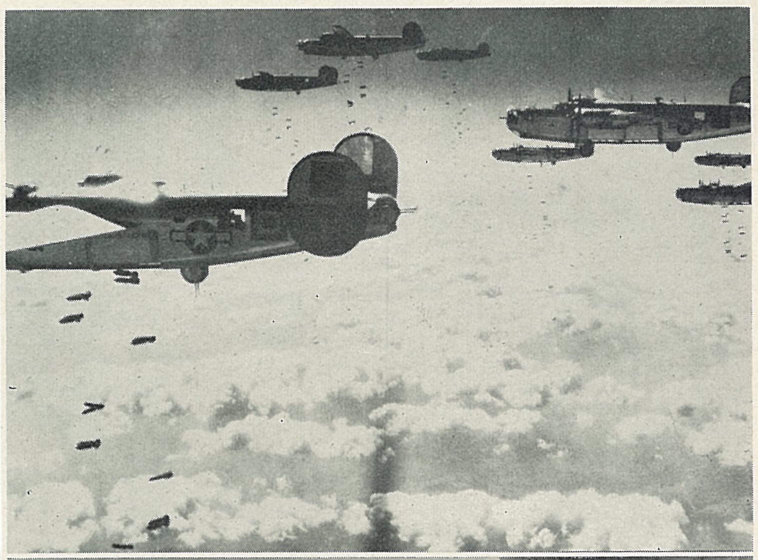
J. W. Chaffee, human factors design engineer at FW, will speak April 7 on "Practical Application of Coordinate Anthropometry in Weapons System Design." On the same day, J. R. Ballentine, FW project structures engineer, will discuss "Sonic Proof Testing the B-58 Weapons System," and C. R. Smith, San Diego design specialist, will speak on "A System for Estimating Cumulative Fatigue Damage by Using the Miner Rule Corrected for Residual Stress."

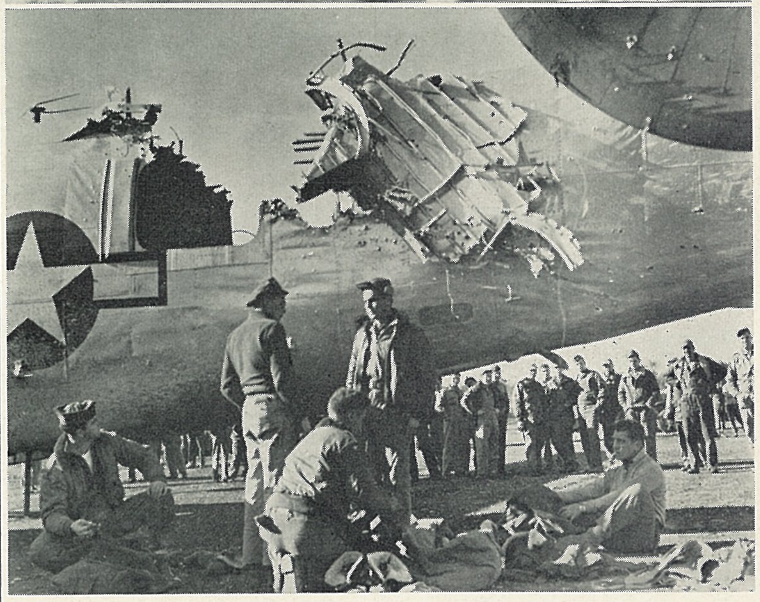
P. R. Shipps and James Frick, SD preliminary design engineers, will talk on "Passenger Density and Accommodations as Factors in Supersonic Transports." A. S. Lermer, SD design engineer, will present "A Temperature-Response Diagram."

From Astronautics will be J. C. Ballinger, design specialist; J. C. Elizalde, senior thermodynamics engineer, talking on "Thermal Environment of Interplanetary Space."

ENGINEER ATTENDS AVIATION PARLEY

Harold A. Bodley, engineering supervisor in FW's Dept. 6-6, attended the 11th annual meeting of the aviation industry committee for St. Louis University's Parks College in East St. Louis March 14. Bodley is a member of the committee, which serves as an advisory group for the university's program in aeronautics.





COMBAT—Formation of B-24s in upper picture is unloading bombs on rail yards at Heiligenstadt, Vienna. In lower picture, this B-24, flying from Italy, received a direct flak burst in waist section forward. Shell exploded inside bomber destroying rudder control cables. Pilot brought ship in on engines only!

U.S. Navy's Atlantic Anti-Sub Patrol Involved Libs in Two Hemispheres

(Following is 56th consecutive installment of Convairiety's continuing history of Convair and Convair aircraft.)

In the spring of 1943 the Navy organized its anti-submarine 10th Fleet and a long Army-Navy jurisdictional squabble was resolved in June with an agreement reached by Gen. H. H. Arnold for the AAF, Rear Adm. John S. McCain for the Navy, and Lt. Gen. Joseph T. McNarney, Army deputy chief of staff. As a result, the Navy assumed responsibility for all anti-submarine operations and its Liberators (PB4Y-1s) began replacing AAF B-24s.

The airmen thus relieved were transferred to the British-based 8th Air Force. In some cases, Navy crews took over the former Army planes. Thereafter, the Navy patrolled the Atlantic from bases in both hemispheres, and by mid-1944 eight of its PB4Y-1 squadrons (a total of 96 planes) were flying from England under RAF operational command. In the Azores, Fleet Air Wing 9 also flew Liberators under British control.

The 8th Air Force (Maj. Gen. Carl Spaatz) was activated in January, 1942, and assigned to England for strategic bombing. Its first strike was a 12-plane B-17 raid on Rouen, Aug. 17. The B-24s made their debut Oct. 9 when 24 Liberators of the newly operational 93rd Group teamed with 84 B-17s in a blow at the Lille steel and locomotive works. This was the first time the 8th AF had dispatched more than 100 bombers on one day. (By late 1944 the biggest raids would find more than 2,000 heavies airborne at once from the British Isles.)

During the winter and spring of 1942-43, major targets of the Flying Fortresses and Liberators were the U-boat pens and yards at Lorient, Brest, St. Nazaire and Wilhelmshaven. By May, Adm. Doenitz conceded that the towns of St. Nazaire and Lorient had been erased as submarine bases, though repair work continued inside heavy concrete pens, which proved indestructible.

After June, 1943, the 8th AF heavies were occupied chiefly with the Combined Bomber Offensive. This was a strategic concept worked out at the Casablanca Conference, calling for U. S. and British bombers to seek "progressive destruction and dislocation of the German military, industrial and economic system." The 8th struck at Kiel, Wilhelmshaven and Antwerp; made its first large-scale attack on the Ruhr, and in July ranged over Norway for the first time. By Sept. 6, when three B-24 groups had returned from temporary duty in North Africa, the 8th was able to launch a flight of 407 bombers against targets in northern Germany.

The potential had grown to more than 3,000 bombers by February, 1944, when British-based heavies staged a six-day series of missions that came to be known as the "Big Week." This offensive opened Feb. 20 when 16 combat wings (more than 1,000 aircraft) were sent against 12 fighter plane production centers in Germany and Poland. The fury of the week's assault reached its peak the 24th when a coordinated mission flung waves of bombers at the Reich from two directions. While the 15th Air Force flew up from Italy to strike targets in southern Germany, the 8th sent 12 wings of heavies against the Schweinfurt ball-bearing plants, the Me-110 fighter works at Gotha, and FW-190 plants in northeastern Germany and Poland. The three B-24 wings that struck Gotha were credited with especially accurate bombings; post-war assessment showed loss of six to seven weeks' production at the Me-110 works.

By now the German fighter force had perfected a bag of new tactics — coordinated attacks by single-engine fighters, air-to-air bombing, and the firing of rocket fusillades at extreme range by twin-engine fighters. The "Big Week" cost the 8th AF 137 heavy bombers, and the 15th lost 89. (By the summer of 1944 the 8th's losses would mount to more than 300 heavies a month.)

Is It News?
Call Convairiety



DANCE TIME—More than 450 attended Convair San Diego Management Club Spring Dance March 18 in newly-decorated main ballroom of Hotel del Coronado. Music was by Les Brown and his band of renown.






NO. ONE—Convair SD Road Runners celebrated first anniversary with March 11-12 trip in De Anza Desert. In left photo, Harold Perkins, president, cuts cake decorated by club members. In center photo, Convair SD's Ralph East and Carl Scholl support standing joke that "Martians" will be visitors at remote campsite. Lower right shot shows most of 21 trailers in position; in top right, hungry travelers line up for Saturday potluck dinner.—Photo by Astro's Ray Parga.

Convair Flower Growers Ready Prize Blooms for Local Shows

Convair green-thumbers from both SD and Astro will have a chance to display their prize blooms in three San Diego shows during April.

CRA rose growers are nurturing their buds in preparation for the annual Convair Rose Show set for Sunday (April 9) in the Floral Association Bldg., Balboa Park.

Gene Zimmerman, CRA commissioner, said that warm weather is hurrying the rose-blooming season and many roses will be in full bloom before time for the show.

"However, we're looking forward to a good list of entries in all classifications," he said. "Anyone at Convair plants is welcome to enter roses he has grown himself."

Entries will be accepted from 8 to 11 a.m. on day of the show with doors thrown open to the public after judging, from 1 to 5:30 p.m. There is no admission charge. Classification lists are available at SD employee services, both plants.

Convair people will also be exhibiting at the San Diego County Rose Society's national show April 15-16 in Balboa Park's Conference and Palisades Bldgs. and in the SD County Orchid Show, April 6-9, Conference Bldg.

Virgil Schade of Convair SD Dept. 31, co-chairman of the Western Orchid Congress to be held in conjunction with the Orchid Show, and judging chairman, said that many Convair orchid raisers will be entered in the annual competition.

Richard Lucier, renowned floral arranger from San Francisco, will put on a demonstration at an open tea and fashion show Saturday (April 8) in El Cortez' Caribbean Room, 1:30 p.m. Tickets will be available in the hotel lobby and at the door. Pre-show cost is 75 cents for the flower show; regular, $1.

Information is available from Paul Jones, show chairman, HE-5-3912; or J. L. Bores, Astro Dept. 401, BR-7-7170.

PHYSICAL CULTURE CLUB IS ACTIVE

Using temporary facilities in the south wing of CRA Clubhouse, Astro's Physical Culture Club continues an active program with classes in judo, and workouts in boxing and weightlifting.

Judo instruction is provided for adults Tuesdays and Thursdays from 4 to 7 p.m. Children's classes are 10 a.m. to noon on Saturdays.

Boxers and weightlifting fans meet Mondays, Wednesdays and Fridays.

Clyde Burkhart, CRA commissioner, has urged special emphasis on boxing and judo, with a view to scheduling competitions in the near future. Interested employees may contact him at ext. 1226 for further information.

FOIL COMPETITION SCHEDULED APRIL 7

A men's and women's intermediate foil competition will be sponsored by the joint Convair SD-Astro CRA Fencing Club at the downtown YWCA at 7:30 p.m., April 7.

The public is invited to attend the event which is open to fencers from throughout San Diego County.

In mid-March, the club held a fencing exhibition during which explanations of various weapons used, as well as target areas for each, were presented.

Demonstrations were conducted by Mike Hurley, Astro CRA commissioner; Lowell Dubberke, Barbara Proppe, and Ray McNamara.

SD Linksmen Edge AF Plant Rep. Team

An elated team of golfers from Convair SD interceptor service nabbed a feud match this month from linksmen of the AF Plant Representative's Office to the tune of 26-22.

Dinner, attentive service, and liberal "words of praise" rewarded Roy Sommers' eightsome after the Torrey Pines meet. Morrie Ezell, heading the AF group, reminded the winning team that the March tourney just evened the score after an AF triumph last fall. He assured bragging Convair golfers that a rubber match would be scheduled soon to settle the tally.

Astro Pistol Field Topped by Ron Legg

Ronnie Legg topped master class shooters in the recent .22 police course match held by Astro CRA Pistol Club at San Diego Police Pistol Range with a score of 293. Glenn Myers' 289 was second.

Other class winners were Ken Bunker, 288, and Warren Leard, 281, expert class; Howard Bluhm, 266, and Don Smock, 264, sharpshooter class; and Paul Stoops, 240, and Wade Bunker, 224, marksman class.

In the .45 short national match, high scores went to Ralph Sanderlin, 280; Ken Bunker, 264, and Glen Myers and Bill Geopfarth, CRA commissioner, tied with 252.

Motorcycle Club Selects Officers

Astro Motors, CRA motorcycle club, elected new officers at a recent meeting.

Serving the club in their new offices are James Kilpatrick, Dept. 280, president; Joseph DuBois, Dept. 250, vice president and road captain; John Wachale, Dept. 453, referee; and Paul Shannon, Dept. 565, secretary-treasurer. Shannon is also CRA commissioner.

Softball Managers Will Meet April 5

Astronautics CRA will again sponsor plant league softball competition this year.

For organizational purposes, a meeting of all managers or representatives will be held at 5 p.m., April 5, in the cafeteria. Any department planning to enter a team must be represented.

Formal entries must be received at the CRA office not later than April 14.

Last year, 30 teams participated in softball competition, and a similar number of entries is expected this year.

Skiers Slate April Outing To Mammoth

CRA Ski Clubs at Convair SD and Astronautics will sponsor a joint trip to Mammoth April 14, 15, 16.

The jaunt will be made by chartered bus, accommodations have been arranged at Mammoth Inn directly opposite the lift area.

Two price plans are offered travelers. The first is for transportation and lodging only for $26 per person. A second plan ($34.75 per person) covers transportation and lodging and offers a choice of one of the following three options: two lift tickets; two T-bar tickets and one lesson; or two rope tow tickets and two lessons.

Arrangements have been made with The Prophet Company to provide box lunches for the bus trip on an individual basis.

On the Saturday schedule are "fun races" to be conducted separately by the SD and Astro groups. Events are designed for less proficient skiers who wish a taste of actual ski conditions.

On Sunday, the annual club championship races will be held, hosted by Convair.

Deposits will be required when reservations are made and April 3 has been set as deadline. At Astro, Jerri Roberts, ext. 1113, is taking reservations, and Bob Weaver, Astro CRA commissioner, ext. 1918, will give additional information. SD skiers should contact either Gary Witt, ext. 2484, SD Plant 1; or Commissioner Joe Harris, AT-4-0278, after 5 p.m., weekdays.

SD skiers will be picked up April 14 at 5:30 p.m. at the Bldg. 19 parking lot; the bus will leave Astro's Bldg. 1 at 6 p.m.

Saturday Schedule For Salvage Yards

Salvage yard schedule for the next four Saturdays at Convair San Diego and Astronautics plants is:

Convair SD — open April 1 and 15; Astro — open April 8 and 22.

SD salvage yard is open from 7:30 a.m. until noon; the Astro yard hours are 8 a.m. to noon.

Ken Lawson New Leader For Model Railroaders

Ken Lawson of Convair SD Dept. 6 was named superintendent, head executive officer, for model railroaders of the San Diego Division, Pacific Coast Region, at an election and model contest March 18.

Lawson not only was tabbed for head division office but was awarded for his contest entries: first, caboose classification; second, displays; and third, freight cars.

He will take office at the Region convention set for the end of April in Sacramento which will be attended by model railroaders from California, Nevada, and Arizona.

Other Convair model railroaders winning at the House of Charm competition in Balboa Park were Karl Busch (Dept. 15), past president of the CRA group and editor of the National Model Railroad Association Bulletin. Busch received a special award in a contest, limited to past regional and national winners, for structure and equipment workmanship. He also won a second place on his passenger car entry.

Other Convair top-placers were: Dave Fyffe of Astro data processing; Terry Wegmann, son of Jack Wegmann (SD-Dept. 6); and James Hamil of Convair SD Dept. 15.

Archers Plan Three Shoots

No less than three shoots are scheduled during April for Convair SD and Astro archers.

The first will be a target shoot at 10 a.m., April 2, at Morley Field.

On April 9 the annual Convair open trophy shoot will be staged at the Balboa Park Field Range. It will be a 56-target event with shooting slated to start at 9:30 a.m. Registrations will open at 8.

Classes will be held for both intermediates and juniors and spectators are invited. New Convair SD club members are reminded that they are eligible to win a door prize which will be given at each monthly shoot.

A third event for SD and Astro archers will be another field shoot April 23 at the Balboa Park Field Range.

Astro archers are urged to utilize the two temporary archery target butts which have been set up in the race track excavation at the extreme east end of the Astro recreation area.

First Meeting Set For Water Skiers

Water skiers at Convair San Diego will open the season Tuesday (April 4) with an open get-together at Gillespie Field Clubhouse.

Everyone interested in the water skimming sport is urged to attend the 6:30 potluck and first business meeting to help plan the program for the spring and summer months, said Gene Sevigny, CRA commissioner.

Coming events will depend on how many people plan to join in the sport, he explained. For information Sevigny may be reached on ext. 1032, Plant 1; or call Herb Wexler, ext. 2366, also Plant 1.

'QUAIL WALK' TO TEST SD-ASTRO SPORTSMEN

Skill at shooting in the field will be tested in a novelty "Quail Walk" slated by SD-Astro CRA Gun Club for their Gillespie Field facility, 9 a.m. to noon, April 5.

Winning shooter from each squad of five will have his choice of prizes. During the "Quail Walk," birds will flush at any range from 25 to five yards, depending upon the "hunter's" skill of approach.

Prizes will also go to shooters using the new targets and added space now available at the club's small bore rifle range. Here, a limited number of club-owned guns will be available.

Ezra Johnson and Jack Swank, CRA commissioners, announce a Gun Club meeting for April 11 at Gillespie Field Clubhouse, to which members' families have been invited. A special motion picture is on the meeting agenda.

Employees wishing to attend the club's hunter safety courses now held at Gillespie Field each weekend, may do so by calling Arnold Schrock, BR-7-4958 after 5 p.m., for enrollment information.

Summer Softball Sponsored by CRA

A summer league softball team will be sponsored in the Pacific Beach area this year by Astronautics CRA.

Open to all employees living in the Ocean Beach, Clairemont and Pacific Beach areas, the team will be managed by Ralph Harper, Dept. 573.

Employees interested in trying out for the team have been urged to contact Harper at Sycamore Canyon, ext. 151, or Gene Petzen, Sycamore, ext. 20, for further information.

Fish and Boat Fans To Go 'Gunkholing'

More than 50 members of Astro CRA Fishing and Boating Club will travel to the Colorado River's Imperial Dam area for a group outing April 8 and 9.

On the agenda are fishing, water skiing, swimming and "gunkholing," (exploring little known coves and inlets by boat).

Final opportunity to register for the trip is at the club's next meeting at 7:30 p.m., April 3, in the CRA Clubhouse.

CRA Sports & Recreation Convairiety

Spring Square Dancing Classes Start April 6

Square dance time is here again.

Convair SD Hoedowners will sponsor a new beginners class starting Thursday (April 6), 8 to 10 p.m., in the American Legion Hall, 4061 Fairmount Ave.

All interested Convair people are invited to slip on their dancing shoes and attend the classes which will be held Thursday evenings for about six months.

Early classes will emphasize basic square dance steps and patterns. Registrations will be accepted for a three-week period after April 6.

Maury Scholz, CRA commissioner, pointed out that a sufficient number of students will have to be in attendance to justify continuation of the course after the three-week registration period.

Those interested are urged to take advantage of the classes at this time as it will be the only course offered during the next six months.

Scholz said that 50 Convair SD Hoedowners made the trip to Pomona March 11 for the all-Convair jamboree. Another 65 dancers represented Astronautics.

"The dance was extremely well organized and the hospitality was the finest," said the commissioner. "We will return the favor when our Hoedowners host a similar dance sometime this fall."

Jim Halfacre Shoots Double

Jim Halfacre (Dept. 180) moved into the winners' circle again to supplant Joe Williamson (Dept. 401), as double winner of March 12 CRA Pistol Club matches.

Williamson had swept the field for the last two meets.

Halfacre stood high at the bimonthly shoot by copping the master class of the .22-caliber police course, with a 294 score, and taking first in the .45-cal. short national course.

Ash Bishop (Dept. 401), CRA commissioner, came in second in the master with 282 and second in the short national.

Ralph Picard (Dept. 7) won the expert class with 279 and stood third in the short national. Bill Dittmann (Dept. 6) was three points behind Picard, 276, to take a second place in the expert.

"X's" determined the standings in the marksman class with Harvey Ingalls (Dept. 6) and Arley Utter (Dept. 129) both scoring 252. Ingalls' four "X's" gave him first place over Utter's single "X."

SPRING SOFTBALL SEASON TO START

A new spring season of softball activity is being organized at Convair SD.

All players interested in trying out for Convair SD's city league squad are asked to contact Pete Beyrer, after 1 p.m., ext. 1245, Plant 1. Times and places for practice are being scheduled.

All departments interested in fielding teams in a shop softball league are asked to send representatives to an organizational meeting April 13, 5 p.m., CRA Clubhouse, Pacific Hwy.

Memberships Offered Now In 'Y' Group

For exactly $4 a year, Convair SD persons can join a program which includes the use of a gym and swimming pool in addition to a dance every Friday night.

Convair SD Recreation Association is offering a discount membership price of $4 in the SO-ED (social educational) program at the Downtown YMCA, 8th and C Sts.

Highlights of the program are:
1. Use of the gym between 7:30 and 9:30 for volleyball, handball, gymnastics, etc.
2. Swimming from 8:30 to 9:30 p.m.
3. Social dancing between 9:30 and 11:30 p.m.

In addition SO-ED membership entitles persons to a variety of educational courses.

Memberships are open to all Convair SD employees and their dependents 18 years of age and over. To obtain discount, Convair persons should pick up application form at employee services, Plants 1 and 2. Regular price is $5 per year.

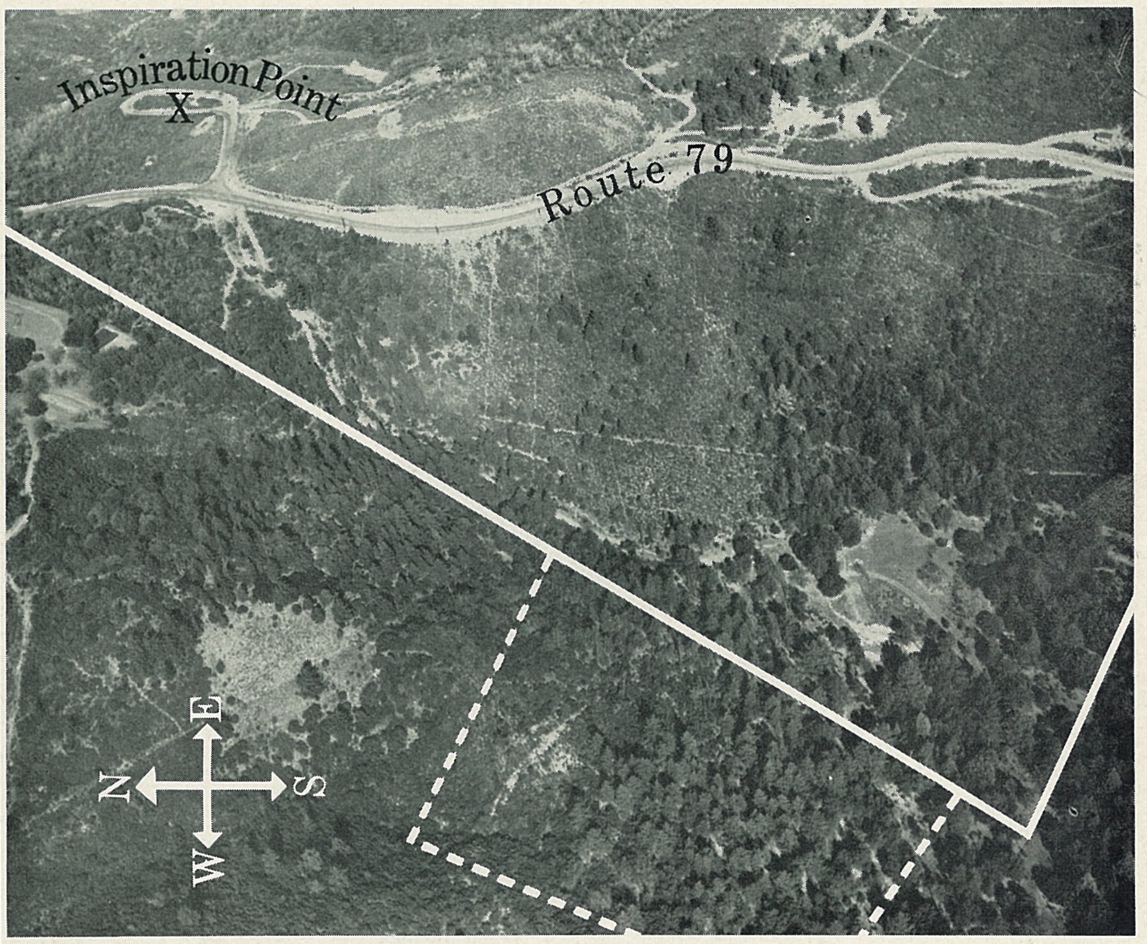
62 Attend Meeting Of SD Coin Club

Last meeting of the Convair SD Coin Club to be held at the Hearing Aid Society Bldg., 3843 Herbert St., regular meeting place for several years, drew one of the largest turnouts ever to attend, said Al Baber, president.

Sixty-two members and guests at the potluck and first quarterly exhibit of the season saw Bob McCracken's display sweep the field as best of show. McCracken's collection of U.S. silver dollars included complete sets of Peace dollars, Carson City and New Orleans mint dollars.

Mattie Knickerbocker won the $5 gift certificate in the monthly drawing.

A new meeting place and new meeting time will go into effect in April. Meetings, now set for third Thursdays of each month, will be held in the Convair cafeteria executive dining room, 7:30 p.m. Next date is April 20.



GROWING—Purchase of additional 35 acres last month increased area of Convair SD Recreation Association's "Pine Crest" resort to 86½ acres. New addition is indicated on aerial photo by dotted line. Route 79 forms eastern boundary of CRA tract. Grading, road building and other construction work is now under way. Sanitary facilities will be completed sometime this summer; area will then be open for camping and picnicking.

Hawaiian Tour Filling Fast; Still Room for 17 Travelers

There is still room for 17 Convair San Diego travelers on the DC-7 chartered for the "Hawaiian Holiday" tour sponsored in July by Convair Recreation Association.

After first announcement of the eight-day Island trip, 26 San Diego people hurried to reserve their seats. Convair Pomona people are included in the tour and are fast filling their quota.

The tour will leave from Los Angeles July 15 and return July 23 via Pan American World Airways. CRA reduced price is $298.50 each. This includes round-trip air transportation, hotel accommodations at a Waikiki Beach hotel, and arranged tours of Oahu.

Reservations are being taken now at CRA office, Bldg. 32, Plant 1, ext. 1245, and must be made before May 1. Deposit of $50 is requested at time of signing; balance is to be paid by June 1.

Brochures explaining complete details of the trip will be available at SD employee services as soon as possible.

Students Needed For Judo Classes

Depending upon response, Convair SD CRA will continue to sponsor judo classes through the summer months.

At present, more students are needed to fill classes held each Thursday, 7-8:30 p.m., in the CRA Clubhouse, 3401 Pacific Hwy.

Sessions are taught by Tony Silva (Dept. 101), holder of the brown belt and well versed in all fundamentals of the art of self defense.

A 25¢ fee is the only charge for each workout. Classes are open to children over six; adults will find the activity an excellent body conditioner, according to Pete Beyrer of the CRA office.

Jim Lack New Commissioner Of Radio Club

James T. Lack (Dept. 6), who has been an active member and instructor of the Convair SD Radio Club, is the newly-appointed CRA commissioner of that organization.

He succeeds Jesse B. Baker who has left the company.

Lack, a flight test instrumentation engineer, joined Convair SD in 1955 and for the past three years has been a leader in CRA Radio Club activities.



Jim Lack

The new commissioner saw six years of U.S. Navy service which encompassed all of the World War II years. Among planes he flew on as an aviation radio operator were Convair-built PBY-5As.

After leaving service he continued his interest in radio as a ham operator: in 1949 his call letters were W5PSA, now they are WA6CYD.

During the past two years Lack has instructed CRA-sponsored Morse Code classes. A class is presently being held on Wednesday evenings. Registration is open to all Convair employees.

Also sponsored by the Radio Club is an operating procedures class held an hour previous to regular club meetings which are held each Thursday after the issue of **Convairiety**. Instructor of the operating procedures class is Wayne Hetzler (K6ITA).

Lack said the club intends to participate actively again this year in the national Field Day event which will be held in June.

Present membership in the Radio Club numbers 30. All regular scheduled club activities are held at the Harbor Drive Headquarters, located across the highway from the Ryan main gate.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

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ARCHERY — Target shoot April 2, 10 a.m., Morley Field. Open trophy shoot April 9, 9:30 a.m., Balboa Park Field Range.

BOWLING — Summer leagues forming. Call Jim Hayman, ext. 1155, Plant 1.

BRIDGE CLUB—Next session April 4, 7:30 p.m., Hotel Barcelona, 326 Juniper St.

COIN CLUB — Meeting April 20, 7:30, Convair cafeteria executive dining room.

FENCING — Foil competition, downtown YMCA, 7:30 p.m., April 7.

GARDEN CLUB — Annual CRA Rose Show April 9 in Balboa Park Floral Assoc. Bldg.; open to public 1-5:30 p.m. Meeting in Floral Bldg. April 12, 7:30 p.m.

GOLF—CRA Yater Memorial match tourney April 1-2 at Coronado and April 8-9 at Flying Hills.

GUN CLUB — "Quail Walk" April 5, Gillespie Field. Meeting April 11 Gillespie Field Clubhouse.

JUDO—Workouts and instruction every Thursday in CRA Clubhouse on Pacific Hwy., 7-8:30 p.m.

MOVIES—Reduced-price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB — Next shoot April 9, San Diego Police Pistol Range, 9:30 a.m.

RADIO CLUB—Meeting tomorrow (March 30), 7:30 p.m., Harbor Drive headquarters.

RIDING CLUB — Meeting Thursday (April 6), 7:30 p.m., CRA Clubhouse, Gillespie Field.

SKI CLUB—Trip to Mammoth April 14-15-16. For reservations, call Gary Witt, ext. 2484, Plant 1.

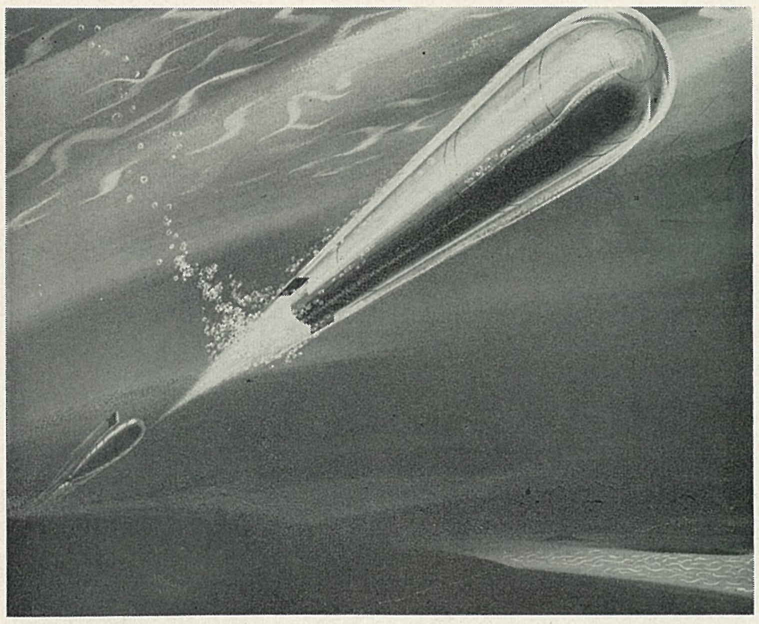
SOFTBALL — To try out for Convair SD city squad call Pete Beyrer, ext. 1245, Plant 1, after 1 p.m. Organizational meeting for shop softball teams April 13, 5 p.m., CRA Clubhouse, Pacific Hwy.

SQUARE DANCING — Beginners class starts April 6, 8-10 p.m., American Legion Hall, 4061 Fairmount Ave.

SWIMMING — Free family swim night April 1, 7-9 p.m., Mission Beach Plunge. Tickets at employee services, Plants 1 and 2.



HOEDOWN—Convair Pomona's Convairiety Steppers were hosts to 115 members of Convair Astronautics' "Astro Nauts" and San Diego's "Hoedowners" March 11 at semi-annual all-Convair "Hoedown." Commissioners, officers and callers from clubs are shown here.



UNDERWATER SPEED—A gaseous envelope such as the one shown around torpedo in this drawing may double speed of underwater missiles.

Gas 'Envelope' to Boost Missiles' Water Speed

Speed of underwater anti-submarine missiles may be doubled by encasing them in an envelope of gas.

This conclusion has been reached by Convair scientists and engineers. The experiments, however, have not dealt with gaseous envelopes for submarines, but the engineers think an extension of the idea for manned vehicle application may be possible.

The experiments are being conducted by Dr. Walter S. Bradfield of Convair's Scientific Research Laboratory, Robert O. Barkdoll of Convair SD's thermodynamics group, and John T. Byrne of SD hydrodynamics.

By providing a hydrodynamic body moving through water with a continuous gas envelope much of the "drag" caused by water clinging to the surface of the body, is eliminated. Because the body, in effect, moves through gas, instead of water, the water cannot cling to the skin.

Bradfield said friction drag under optimum conditions can be reduced by 95 per cent.

The gaseous envelope, or vapor layer, has been created by heating the vehicle or by building into it a material which, in reaction with sea water, creates heat and vapor.

According to Byrne, the effect of gaseous envelope on a missile would be to increase its speed and range.

In experiments at Convair's towing basin in SD, a hydrodynamic graphite body a foot long and 1½-inches in diameter was heated to 2,000 degrees Fahrenheit and pulled through the water at speeds of 20 feet a second.

Bradfield said friction of the super-heated graphite body was reduced more than 90 per cent below that of a cold graphite body.

He said the principle may be worthwhile for ballistic missiles fired from under water, like the Polaris.

"There would be some value in getting the ballistic missile from the submarine to the surface of the water faster," Bradfield said, "and a great deal of value in permitting the missile to leave the ocean without dragging a lot of water with it."

Nuclear Test Task Awarded To Convair FW

Convair FW nuclear engineers will tour the nation with a radiation source to be used in standardizing radiation sources at Air Force nuclear facilities.

The 6,000-mile journey will include 12 irradiation facilities in six states and District of Columbia.

Work is being done under a contract awarded Convair FW by Wright Air Development Division, according to Andrew Kalitinsky, nuclear program director.

Enclosed in a trailer and pulled by a truck, the "touring laboratory" will house a 2,500-curie cobalt-60 radiation source for gamma ray radiation of known intensity.

Cobalt source capsules are contained in the 5,000-pound irradiator, with a maximum radiation rate of about 400,000 roentgens per hour.

Convair nuclear engineers will use this source and their instruments to measure sources and calibrate instruments of other facilities, Kalitinsky said. When necessary, other instruments will be adjusted to match Convair nuclear instruments.

In this way, data provided the Air Force by each facility will be uniform, pointed out K. R. Spearman, nuclear project group engineer. Spearman said R. D. Longley, nuclear engineer, and B. L. Cash, senior nuclear engineer, would both be used to conduct tests during the three-month tour.

Data obtained during the tour will be submitted by Convair to Wright Air Development Division nuclear laboratories.

"We were gratified to receive the award," Kalitinsky said. "It is a significant AF tribute to Convair FW's advanced capabilities in nuclear engineering."

Texas F-102s Accident Free

Two Texas-based Air Force squadrons are piling up accident-free records with Convair-built jet interceptors.

The 331st Fighter-Interceptor Squadron at Webb AFB, Big Spring, Texas, recently received Air Defense Command's Flight Safety Award for 1960. The award covered the transition period to F-102s.

Col. Alford V. Walton, commander of Oklahoma Air Defense Sector, presented the award to Lt. Col. Dick M. Crowell, 331st commander, in a recent ceremony, according to a report from P. D. Weaver, Convair SD field service representative at the base.

At Perrin AFB, near Sherman, Texas, another F-102-equipped squadron, the 3558th Flying Training Squadron supported by the 3556th Flight Line Maintenance Squadron, has logged over 5,550 flying hours without accident in the last eight months.

Col. William E. Buck Jr., wing commander, said, "We believe our safety record would match any other F-102 outfit." He also pointed out that another record was set in January when over 1,119 hours were flown in F-102s.

So far, at least 110 pilots, instructors and students have been checked out in the Convair jet interceptors.

L. D. Harris and D. D. Arce, Convair SD reps, praised Perrin operations for the teamwork of all personnel at the base—supply, maintenance, training — during the F-102 conversion program.

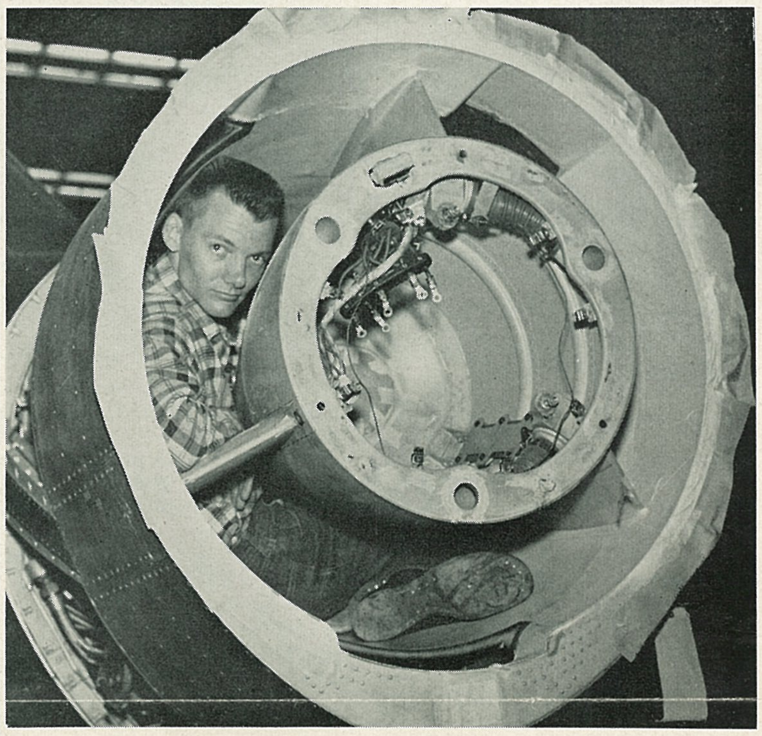
'Junior Scientists' Include Astro Son

SCHILLING AFB — Mike Jordan, son of Astro's M. A. Jordan here, recently received special recognition as a member of the "Meet the Junior Scientists" series at San Diego's Balboa Park.

An eighth grader in San Diego, Mike is presently winding up his first year in a special Astrophysics program at San Diego State College. Last year he attended a convention at San Jose where he was guest of Stanford University for a tour of Lick Observatory.



NEW MEMBERS OF "CLUB"—Newest qualifiers for F-106 Mach 2 "club," during recent Senior Officers Course at 4757th Air Defense Squadron base, Tyndall AFB, Fla., are top AF officials (from left) Air Vice Marshal Murray D. Lister, NORAD Hdqrs., Ent AFB; Col. Philip A. Sykes, 64th AD Hdqrs., Stewart AFB; Col. Robert L. Harringer, ADC Hdqrs., Ent; Col. Burton E. McKenzie, Lee E. Warren, both of FAA, Washington, D.C.; Col. Peter H. Remington, NORAD Hdqrs., Ent; Col. Gordon M. Graham, USAF Hdqrs., Pentagon; Col. Wayne E. Rhynard, Sioux City Air Defense Sector; Col. William G. Draper, MATS, Washington, D.C., and former pilot for President Eisenhower.



DISAPPEARING ACT — Though he's six feet and weighs 130 pounds, J. M. Morris, aircraft mechanic in Dept. 94 at FW, is skillful at disappearing into B-58 engine nacelle to check for "foreign" objects. Sometimes, however, he needs his associate, C. L. Richards, to push him in, or pull him out! Fortunately, Morris is not one to suffer from claustrophobia.

Rubber Die Process Used For New Applications in Parts Forming

New "short run" applications of a tooling concept discovered some 15 years ago are being investigated at Convair San Diego.

Principles of the method—known as the multi-purpose rubber die, or Guerin process—were demonstrated this month for about 20 representatives of Convair departments concerned.

To emphasize potentials of the process six different parts were formed and blanked with one convulsion of the press!

The demonstration was conducted by Max Sturman who joined Convair SD in 1953 as a tool and die maker, later joined Dept. 190 as a tool development technician, and is now with General Dynamics Advance Products Department.

Present research into the rubber blanking method at Convair SD indicates that substantial savings can be obtained in lead, tool building and manufacturing run time.

To obtain additional comparative costs six production parts are being manufactured—one set by the rubber blanking method and the other set by conventional tool and die procedures, said A. P. Langlois, manufacturing development supervisor-forming.

The process is presently being used at Convair to produce a number of small electronic assembly parts. Cost reduction statistics show a savings of roughly two-thirds over the previous method of manufacture.

The rubber blanking method is basically simple, explained Sturman.

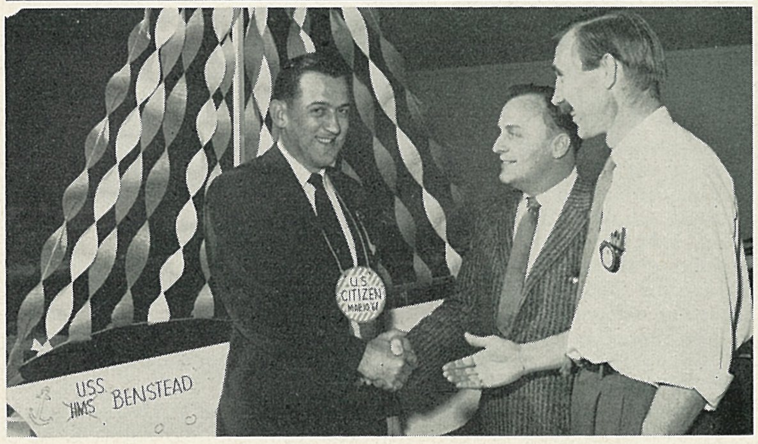
A blanking die is made with the same dimensions as the part desired with a given thickness; the die is then put in a press; in the split second as the press comes down, the trapped rubber head forces metal to form over the die, the rubber grips the side of the metal, and with continued pressure severs the metal around the die.

Reinvestigation of the "multi-purpose rubber die process" was instigated by Sturman who submitted an Employee Suggestion on it some time ago.

Near completion at the present time is a detailed research report determining production potential of the method which will spell out required equipment techniques, and limitations for Convair use.

It points out that the method can be used with conventional crank, hydraulic or drop hammer presses capable of generating 2,500 psi in the trapped rubber head.

Two other major advantages of the process are that burring operations are not required on most pieces and that a single die can be used to make both left and right parts with equal ease by merely reversing the die.



END OF WAIT—Engineer Roy Benstead who came to Convair SD from England and Canada in 1956 became naturalized citizen March 10. He is one of many Convair "alien engineers" who have qualified for U.S. citizenship. Benstead is shaking hands with Joe Margole, his sponsor. At right is Joe Bradshaw (also Dept. 6) who soon will qualify for citizenship himself.



BLANKED—Max Sturman, now with General Dynamics Advance Products Department, demonstrates rubber blanking process. Arrows point to die and trapped rubber head. In background inspecting quality of parts produced are (from left) C. J. Sack Jr., G. C. Thiersch, E. P. Faulwetter (all Dept. 190), H. B. Millman (Dept. 205), R. B. Grimes (Dept. 201).

GENERAL DYNAMICS

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SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.

990 No. 1 to Return To Flight Line Soon

Convair San Diego's second 990 to enter flight test made a successful first flight for two hours March 30 and will continue to fly "as often as possible" until the latter part of April.

At that time it will change places with 990 No. 1 which has been undergoing pod and pylon modification, as well as other updating. Aircraft No. 1 then will return to flight status.

Schedules call for No. 2 to undergo modification for some three weeks and be back in the air before the middle of May.

Another flight test 990 will enter the program the first week in May and be joined by a fourth in early June. This last plane will have the pod and pylon modification incorporated before first flight.

Flights of the second 990 during the past two weeks have tested out the plane's control system, its stalling and longitudinal stability characteristics, and given the crew an opportunity to evaluate the all-around production configuration of the airplane.

On its maiden flight March 30 the second 990 airliner, piloted by John Knebel, took off from Lindbergh Field at noon, performed successfully for two hours, then landed at North Island Naval Air Station. Shortly after, it took off from NAS and landed at Lindbergh Field.

Regular crew members of the No. 2 airplane on the first flight were Frank Dreschler, flight test engineer; Duane Anderson, flight engineer; D. J. Frye, instrumentation engineer. Don Germeraad, chief engineering test pilot and regular pilot of 990 No. 1, was copilot on No. 2's first flight. Also on board were other crew members of 990 No. 1: A. E. Hunt, R. M. Bloom, R. J. Dunn.

The 990 is scheduled to go into commercial service late this year. Thirty-seven have been ordered by domestic and foreign airlines. They will carry 96 passengers first class or 121 coach.

SWANK WILL SERVE ANOTHER TERM AS PRESIDENT OF CRA

Jack Swank was returned to office for his second term as president of Convair San Diego Recreation Association Employees' Council at last week's election and installation of new officers.

Three other experienced CRA leaders were chosen for other 1961-62 posts: Joe Harris, vice president; Paul Pearson, treasurer; and Martha Woodberry, secretary.

Swank (Dept. 3-8) joins Tony Berardini and Ed Robinson as the only presidents to serve two consecutive terms in the Council's top office since its formation in 1949. He has headed the CRA Gun Club as commissioner for the last four years and has been active in numerous SD recreational activities for over 15 years.

Highlight of his just-concluded term of office was purchase of Pine Crest, 86½-acre resort in the Cuyamacas for the exclusive use of Convair SD families. Roads are now being graded so that the area can be used for camping and picnicking this summer. Full use of the resort will be possible by next year.

Harris (Dept. 6-40), new vice president, joined Convair SD in flight test in 1939. He has been a member of CRA Council for 10 years and was instrumental in formation of ice skating, snow ski, and water ski activities. In early years of organized sports, he headed all three as commissioner. Under his direction, the first fiber glass boat for use by the water ski group was built as a cooperative effort.

Since 1955, Harris has devoted

(Continued on Page 2)

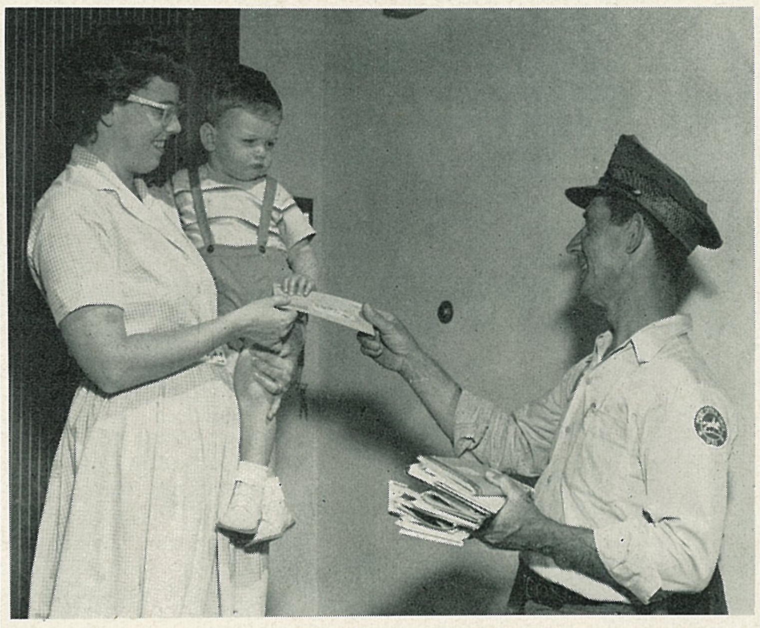
Tip on Easter Seals Issued by Con-Trib

Members of Convair SD Con-Trib-Club have been advised that they may keep and use Easter Seals without sending in personal donations.

A Con-Trib-Club check for $4,000 has been sent to the 1961 Easter Seal Drive. Morley H. Golden, president of San Diego Society for Crippled Children, recently sent a letter of thanks to Con-Trib members in which he also explained the stamp situation.



RECREATION LEADERS—New officers of Employees' Council of Convair SD Recreation Association were elected last week. From left they are Paul Pearson, treasurer; Martha Woodberry, secretary; Jack Swank, re-elected president; Joe Harris, vice president.



BONDS DRIVE—Typical of thousands of U.S. Savings Bonds buyers at Convair San Diego is family of Richard C. Bower (Dept. 6-1). Here, Mrs. Bower and son, Keith, meet mailman delivering bond.

Electronic Capabilities Retained Within Dept. 6

A number of organizational changes and realignments have gone into effect at Convair San Diego to provide an integral electronics organization capability within the operating division.

Moves were made in conjunction with the dissolution of Convair SD's Dept. 7 and formation of the San Diego facilities of Military Products operating division of General Dynamics/Electronics.

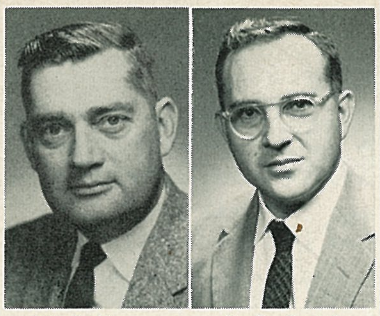
Some 170 persons have been transferred from what was formerly Dept. 7 into Convair SD Dept. 6. In their number are small groups of experts and highly-trained personnel who enable Convair SD to retain capabilities which cannot be replaced.

In the product design subdepartment, W. R. Monroe assumes the position of chief electronics design engineer, reporting to R. P. White, assistant chief engineer-product design.

Electronics is also integrated within the research and development subdepartments and E. C. Oertel is acting chief electronic systems engineer reporting to A. Burstein, assistant chief engineer-research and development.

Monroe will be responsible for orderly development and growth of the electronics design section so that it keeps pace with the electronic content of operating division programs.

All former Dept. 7 personnel recently transferred to product design subdepartment will report to Monroe, who also continues to report to the chief engineer, W. W. Fox, in staff capacity as manager of reliability.



W. R. Monroe E. C. Oertel

Oertel assumes his "acting" position in addition to his other duties as assistant to the chief engineer-electronics.

Reporting to Oertel in his new capacity will be advanced electronics systems group under direction of S. H. Logue, a radiation technology laboratory under A. S. Dunbar (acting), and an IR optics laboratory. Personnel in the last group will report directly to Oertel until a laboratory chief is appointed.

Other Convair realignments have also taken place since the formation of General Dynamics/Electronics.

Solid state and crystal physics, under direction of Dr. E. G. K. Schwarz, reports to Dr. A. E. S. Green, and becomes part of the physics laboratory.

The standards laboratories, under W. R. Holmes, report to G. E. Putness, assistant chief engineer-administration, and become part of the administrative subdepartment.

★ ★ ★

Two other appointments are those of F. M. Millican and W. S. Dickey to the staff of Oertel, assistant to the chief engineer-electronics.

Millican assumes cognizance over electronic facilities and facilities planning, coordination of company-sponsored electronic programs, and will also maintain current knowledge of the status of electronic activities in other General Dynamics divisions.

Dickey will be responsible as project engineer of the various electronics contracts transferred from Dept. 7 to Dept. 6.

BLOCK OF CHARGER SEATS RESERVED

Convair SD sports fans starting tomorrow (April 13) may visit employee services, both plants, to purchase reserved season tickets for home games of the San Diego Chargers.

A choice block of seats in Balboa Stadium has been set aside for Convair SD employees and seats are being offered on a first-come, first-served basis. A seat may be reserved with down payment of $10, with balance to be paid by June 19.

Reservations may be made for all 10 Charger home games, including three exhibition tilts, or for the seven league games only. Offer will be withdrawn April 21.

Employees may use the company's industrial allotment plan by which funds may be saved to accomplish the purchase before the due date.

Blood Credit at SD Will Last Into June

Second-shift people at Convair SD Plant 1 came through with 106 pints of blood at the March 23 bloodmobile visit.

This boosts Convair SD's credit at the San Diego Blood Bank to 188 pints, said Ken Wulfemeyer of SD employee services. The amount of blood now on hand will carry SD through until the June bloodmobile.

'Salt it Away' Bond Campaign Begins Monday

"Down payment on a home" . . . "Buy a car" . . . "Finance a wedding" . . . "A feeling of security" . . . "Toward a college education for my children."

These are only a few of the reasons Convair SD people give for buying U.S. Savings Bonds.

In any case, whatever the reason, buying bonds has become a habit for one of every two employees at Convair SD.

To bring the benefits of saving bonds to the attention of non-buyers is the purpose of a bond drive in the plant starting next Monday (April 17) and ending the following Friday.

During that week all those presently not purchasing bonds will be contacted and asked to take advantage of the "automatic savings" features of the payroll deduction plan.

Tab cards will be channeled through supervision to all non-bond buyers. All that is necessary is to fill the card out and indicate the amount of deduction. Amounts may be as small as $1.25 per week or as large as the employee desires (in increments of 25 cents).

At this time present buyers are also encouraged to increase the amounts of their deduction and/or the size of the bonds they are purchasing.

Participation in the program, however, is optional for everyone.

Once a person authorizes a deduction and signs a tab card no further action on his part is required. When enough money accumulates to buy a bond of the denomination specified the bond is delivered, by mail, to the home.

During the 20 years they have been available, two billion Series E bonds have been purchased. Eight million Americans presently purchase bonds on the payroll savings plan.

Club to Name Top Scholars

Winning Convair SD son and daughter of 1961 SD Management Club scholarships will be chosen next week (April 19) from the six finalists surviving second round of the current contest.

Two of the following will receive $1,000 scholarships, the other four will get $100 U. S. Savings Bonds as runners-up: Carole J. Urbanac, daughter of Carl M. Urbanac, Dept. 6; Gwendolyn R. Nowry, daughter of S. E. Nowry, Dept. 6; Evelyn M. Rockar, daughter of Tibor Rockar, Dept. 190; David W. Anderson, son of T. A. Anderson, Dept. 192; William A. Truex, son of A. C. Truex, Dept. 6; Carl Cheney, son of H. K. Cheney of Dept. 6.

Selection of the winners will be made by the scholarship committee with the assistance of three outside judges. Judges for this year are J. C. Kerns, personnel department, Ryan Aeronautical Co.; Dr. Robert Penn, psychology department, San Diego State College; and Mrs. Margaret Olson, dean of students, San Diego City College, formerly SD Junior College.

Following personal interviews and deliberations leading to selection of the two top winners, all contestants, their parents, scholarship committee members, judges, and Larry Lawson, president of the Management Club, will join in luncheon at the Convair cafeteria executive dining room. Announcement of the winners will be made some time during next week.

Log Book Entries

Promotions

SAN DIGEO

Promotions to or within supervision effective March 27.

Dept. 4, Material Office: To chief of material contracts and services, G. H. Blain. To material systems and procurement supervisor, R. E. Wilkinson.

Dept. 44, Material Control: To chief of material control, J. F. Scanlon. To material shortage supervisor, R. E. Roe.

Dept. 45-0, Procurement Planning: To chief of procurement planning, L. F. Tubbs Jr.

Dept. 47, Material Cost and Estimating: To chief of material estimating, J. D. Fink. To chief of material costs and budgets, F. K. Estes. To chief of material price analysis, E. C. Krug.

Dept. 97-0, Data Processing: To chief of data processing, G. O. Withem.

Dept. 116, Electric Bench: To asst. foreman, C. R. Hendriksen.

Dept. 120, Jet Transport Bench Subassembly: To asst. foreman, J. P. Hood.

Dept. 135, Jet Transport Forward Fuselage Structure: To asst. foreman, D. E. Allman, M. M. Lopez, J. L. Moreno.

Dept. 136, Jet Transport Beltframes and Underwing Canoe: To asst. foreman, R. E. Cloud.

Dept. 137, Jet Transport Aft Fuselage Structure: To asst. foreman, L. Drinkard, J. R. Grimm, S. E. Moon Jr.

Dept. 138, Jet Transport Forward Fuselage Primary: To asst. foreman, W. C. Griffin, F. E. Munson, K. L. Sedwick.

Dept. 140, Pod and Pylon Assembly: To asst. foreman, M. C. Tracy.

Dept. 141-1, Jet Transport Delivery Preparation: To foreman, R. C. Dale.

Dept. 145, Jet Transport Wing Structure: To asst. foreman, D. R. Winkler.

Dept. 146, Jet Transport Wing Primary and Wing Mate: To asst. foreman, B. F. Bean Jr., H. Patterson Jr.

Dept. 148, Jet Transport Major Mate: To asst. foreman, J. C. Risner.

Dept. 160, Jet Transport Final Assembly: To asst. foreman, W. C. Johnson.

Dept. 171, Field Operations: To asst. foreman, R. M. Chesebro.

Dept. 180, Proofing Mock-Up: To foreman, R. J. Ratliff. To asst. foreman, M. B. Watling.

Dept. 188, Inspection-Plant 1: To inspection asst. supervisor, J. Gann, H. L. Kensinger, G. W. Ramsey, E. White.

Dept. 192, Manufacturing Control-Plant 1: To M/C general supervisor, M. L. Sweeney. To M/C asst. supervisor, E. P. Lawson, A. N. Traxler. To clerical asst. supervisor, R. C. South. To M/C asst. foreman, M. L. Constantz, L. M. Goldberg, C. W. Hartman.

Dept. 197, Quality Control: To inspection supervisor, L. I. Fredrickson. To inspection asst. supervisor, R. L. Hallahan.

Dept. 271, Model 8 Field Operations: To asst. foreman, E. L. Risner.

Dept. 288-3, Inspection-Plant 2: To inspection asst. supervisor, E. C. Martin.

Dept. 292-1, Manufacturing Control-Plant 2: To M/C asst. foreman, W. D. Wills.

Dept. 400-4, Tooling: To production planning asst. supervisor, V. J. Berger.

Personals

SAN DIEGO

I would like to express my sincere appreciation for the beautiful flowers and expressions of sympathy at the death of my husband, C. L. Holton (Dept. 44-3).

Mrs. C. L. Holton.

* * *

The beautiful floral tributes, messages of sympathy and contribution by Convair friends at the death of Mrs. Iva A. Browning, Dept. 7, are gratefully acknowledged and deeply appreciated.

Mrs. Ruby Wallace and
Mrs. Opal Creel, sisters,
June F. Timberman, Dept. 7.

* * *

I am most grateful for the cards, beautiful flowers and personal visits by friends during my hospitalization.

Dorris Beyer, Dept. 6.

* * *

My sincere appreciation to Convair employees for the lovely flowers, cards and messages of sympathy received at the death of my father, John Farinha.

Phoebe Faias, Dept. 142.

* * *

I wish to acknowledge with deepest gratitude the kindness and sympathy accorded me and my family during our recent bereavement.

E. W. Pagel and family, Dept. 31.

Retirements

SAN DIEGO

ANDERSON—Hulen, Dept. 31. Seniority date Sept. 22, 1950, retirement effective Feb. 20, 1961.

CULP—Earl M., Dept. 24-3. Seniority date July 25, 1952, retirement effective March 24, 1961.

HELMS—Arthur R., Dept. 25-4. Seniority date Oct. 12, 1950, retirement effective March 31, 1961.

IRWIN—Edward, Dept. 44-3. Seniority date Aug. 23, 1956, retirement effective March 31, 1961.

KNUTSON—David S., Dept. 140. Seniority date Dec. 8, 1936, retirement effective March 21, 1961.

LAFFERTY—Mary C., Dept. 98-6. Seniority date March 4, 1958, retirement effective March 31, 1961.

MacARDLE—Bernice R., Dept. 216. Seniority date Jan. 5, 1956, retirement effective March 10, 1961.

NELSON—Harry C., Dept. 400-2. Seniority date May 25, 1953, retirement effective Jan. 29, 1961.

SMITH—Richard G., Dept. 3-1. Seniority date March 23, 1951, retirement effective March 23, 1961.

Service Emblems

SAN DIEGO

Service emblems due during the period April 1 through April 15.

Twenty-five year: Dept. 201, G. J. Friel.

Twenty-year: Dept. 6, J. J. Arnieri, E. C. Ewert, J. A. Gesiakowski, W. R. Hall, David Krause, Philip Pekofsky, E. A. Zivolich; Dept. 7-80, Walter Bailey Jr.; Dept. 14-7, C. D. Duncan; Dept. 46-0, R. H. Lange; Dept. 63-1, J. W. LeVine; Dept. 138, C. M. Bradley; Dept. 192-2, C. W. Andreasen; Dept. 400-1, K. E. Fountain; Dept. 401-1, G. R. Bell (due 1-1-61).

Fifteen-year: Dept. 6, Clifford Fennell, E. H. Oldenburg; Dept. 14-4, Zola R. Reasoner; Dept. 31, L. H. Barela, E. H. Cantwell Jr., Robert Padilla; Dept. 145, Salvador Bringas; Dept. 160, W. R. Lucore; Dept. 197-1, R. L. Scherf; Dept. 271, F. G. Werner.

Ten-year: Dept. 1-96, R. W. Dickinson; Dept. 3, J. A. Birdsong, Gloria L. Schneider; Dept. 6, K. M. Alger, Wayne Calvin, Gale J. Kincaid, E. S. Soltesz, R. E. Warrick; Dept. 7, J. E. Elson, Valeria A. Martineau; Dept. 11, D. H. Digges; Dept. 14, Mary C. Crist, R. C. Galston, Mamie G. Moranville, M. F. Schmitt, Beatrice B. Sullins, J. L. Sullivan.

Dept. 15, H. R. Smith, H. J. Walsh; Dept. 21, F. C. Castro; Dept. 25, J. S. Boschetto, J. Y. Martin, J. D. Matthews, E. B. Medina, Alice H. Wagoner; Dept. 31, S. J. Elliot, Robert Imhoff, A. K. Lasley; Dept. 34, J. C. Pageler Jr., E. F. Sharnsky, A. W. Whiteman; Dept. 44, Verna M. Johnston.

Dept. 102, Martin Capossere; Dept. 116, Fairy W. Phillips; Dept. 120, Ruby S. Davis, Elinore G. Newlin; Dept. 123, L. E. Niemet; Dept. 128, Alva S. Curry, Mildred L. Garben, Estelene W. Morrow, Naomi M. Tollison; Dept. 129, Edythe W. Lewis.

Dept. 133, Dorothy T. Peterson; Dept. 139, Gloria V. Salazar; Dept. 140, R. C. McLalan; Dept. 141, R. C. Jaquez; Dept. 143, Harriet M. Cooper; Dept. 145, Daniel Corso, R. C. Lessard; Dept. 148, J. W. Hammond, M. D. Larson, H. C. Tripp; Dept. 160, W. J. Doherty, F. A. Rodriguez, J. J. Salas; Dept. 171, Anton Fencl; Dept. 188, Helen L. Lynn, A. C. Manire, June D. Olsen, M. E. Stout, D. L. Turner.

Dept. 190, Dorothy R. Pinks; Dept. 192, Mary K. Ball, Ileath F. Bridges, M. L. Harvey, Vera W. Heckel, Wynona P. Matlock; Dept. 197, A. J. Wood; Dept. 201, Elizabeth M. Brown; Dept. 204, Alberta Barrett; Dept. 205, Rita O. Lund; Dept. 215, Edith B. McCormick; Dept. 218, Bertha K. Moreno, Aliene A. Nelson; Dept. 267, J. C. Hale; Dept. 292, J. W. Andrew, R. L. Sumpter; Dept. 400, W. H. Mathews, Harold Taddiken; Dept. 401, W. D. Anderson, E. C. Cunningham, J. L. Echavarria, H. L. Hays, Vestal B. Jones, Viola W. Sherman.

Births

SAN DIEGO

HAMILTON—Daughter, Joyce Arleen, 6 lbs., 10 oz., born March 14 to Mr. and Mrs. E. C. Hamilton, Dept. 146.

HILL—Daughter, Shirley Jean, 6 lbs., 4 oz., born March 26 to Mr. and Mrs. W. C. Hill, Dept. 137.

OLIVARES—Daughter, Yvonne Diana, 8 lbs., 1½ oz., born March 18 to Mr. and Mrs. C. Olivares, Dept. 138.

WILLIAMS—Daughter, Leslie Ayne, 6 lbs., 7 oz., born April 4 to Mr. and Mrs. C. H. Williams, Dept. 15-4.

Deaths

SAN DIEGO

GAGNON—A. E. (Al), Dept. 288. Died April 3. Survived by wife, Georgianna; two brothers, four sisters.

MILLER—Vincent L., Dept. 120. Died March 23. Survived by wife, Charlotte; one daughter, two grandchildren.

SD'S EMPLOYMENT OUTLOOK SURVEYED

A General Dynamics employment forecast for the San Diego area was released late last week.

C. Rhoades MacBride, Convair president, said General Dynamics Corporation payrolls are at approximately 40,000 in the area and are expected to hold at this level through summer with a decline of several thousand possible by year's end and a substantial drop expected in 1962.

Only minor variations in employment are expected at General Dynamics Electronics facilities, at General Atomic and Astronautics operating division of Convair. The employment curve principally affects Convair's San Diego operating division.

San Diego area Convair employment is approximately 36,500 at present. A peak of 38,000 is expected in mid-summer and a decline to 33,000 by the end of the year.

★ Convairiety ★

Founded Sept. 1, 1948. Published in six editions (Fort Worth-Daingerfield, San Diego-Palmdale-Holloman, Astronautics, Astronautics Off-Site, Pomona and the Mail) by Convair Industrial Relations, General Office, San Diego, Calif. Logan Jenkins, editor-in-chief.

Approximate current total circulation, over 70,000. News items and letters to the editor are solicited, but no advertising can be accepted.

SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Fred Bettinger, news editor; Grayce Fath, Helen Pemberton.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.

SWANK WILL SERVE ANOTHER TERM AS PRESIDENT OF CRA

(Continued from Page 1)

his time exclusively to the Snow Ski Club as CRA commissioner. It increased in popularity from around 30 original members to as high as 125 at its peak. It was due to Harris' activities that the Annual Open Club Championships for all San Diego clubs were organized and he was instrumental in obtaining recognition for SD ski clubs in the Far West Ski Association.

In addition to his other CRA duties, Harris is the "man behind the sound" at all CRA affairs, handling sound equipment at Pecan Park and Gillespie Field whenever the occasion arises.

Pearson, superintendent in the jet transport program and Convair veteran, succeeds Ken Wulfemeyer as treasurer. He has been a member of CRA Employees' Council since 1949 and served as president during the 1952-53 term.

He helped form the square dancing activity in 1950 and acted as assistant commissioner. He then expanded his interests to the Riding Club, heading the group as commissioner and co-commissioner for several years.

Since 1954 he has been a commissioner-at-large in charge of special events and member of the executive council. As such, he was among those responsible for the all-Convair picnics held annually at Del Mar Fairgrounds until recent years and was one of the main figures in purchase and development of Gillespie Field and Pecan Park.

Martha Woodberry, CRA commissioner of women's activities, is only the second person to hold the office of the secretary of the CRA Council. She succeeds Grayce Fath (Dept. 1-32) who submitted her resignation after serving the Council in that capacity since its inception 12 years ago.

Mrs. Fath, member of the Convairiety staff, retains her CRA post as co-commissioner of SD women's activities in which she has been active since they were first organized at Convair SD.

Mrs. Woodberry, secretary to J. K. Field, chief of employee services, joined Convair 10 years ago. She is well known at Convair SD as organizer and director of CRA fashion shows, charm school courses, and the former monthly Ladies' Night programs.

In addition to women's activities, she directs ballroom dancing, Choralaires, and ice skating as commissioner. She held her first elective office in CRA Council last year as vice president.

Convair Daughter Leads Queen Race

A 16-year-old Convair SD daughter is leading the race for queen of the 1961 Pacific Beach Aquafair slated May 18-21.



Leslie

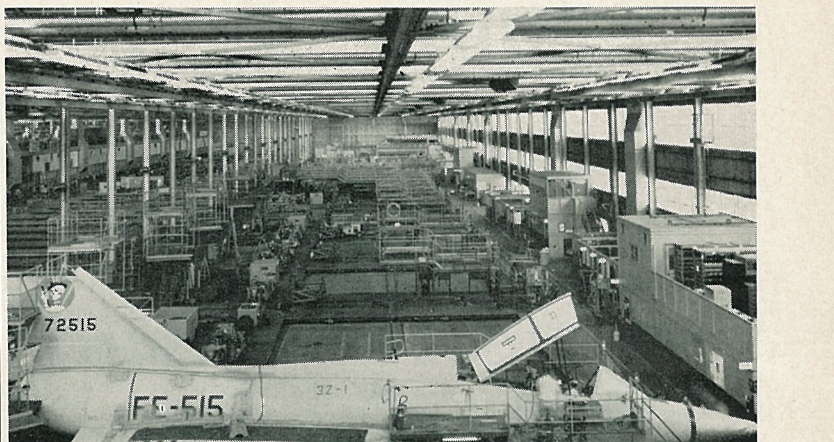
Leslie Greenwood, daughter of Mr. (Dept. 190) and Mrs. Clifford Greenwood, is in the top position among 52 contestants from throughout the county vying for the honor.

A student at Mission Bay High School, the Convair lass is an art major and Junior Achievement enthusiast. The Aquafair queen will be crowned May 12 at Catamaran Motor Hotel.

Bridge Play Now On Each Tuesday

Bridge lessons for Convair SD players are now being held every week, said Pete Beyrer, CRA commissioner.

Meetings are each Tuesday night at 7:30 p.m. at Hotel Barcelona, 326 Juniper St. Master point nights are the third Tuesday of each month.



END OF LINE—This last F-106 to undergo test to tactical modification at Convair SD Plant 2 stands in solitude at end of abandoned assembly line. Plane was factory completed last week, ending F-106 program which started in 1956.

Hurry and Submit Your Name For Padre Ticket Draw Friday

Free baseball tickets to the Padres' first home games as the season swings into action this month will be going to lucky Convair San Diego people after this Friday's drawing.

CRA will be giving away two tickets to each SD person whose name is drawn from the hat. Deadline for depositing slips at SD employee services is 3:30 p.m. Friday (April 14).

The first drawing will be for games with Seattle, Vancouver, Spokane, Portland to be played at Westgate Park from April 21 through May 3. Schedule is: Seattle—April 21, 22, 23; Vancouver—April 24, 25, 26, 27; Spokane—April 28, 29, 30; Portland—May 1, 2, 3.

Each entry must include name, clock number, shift, department number, location, and telephone extension. Only one entry per person is allowed.

Boxes are located at employee services counter; Rose Canyon, in the office of Virginia Cannon, ext. 2125; at the seaplane ramp, in the office of Leonard Smith, Dept. 31 foreman's office, Bldg. 37.

Club to Meet At Race Track

A gala program, which includes dog races, a steak dinner, and Mexican music and entertainment, is on tap for Convair SD Management Club when it conducts its first meeting across the border at Caliente April 22.

Tickets for the event, sponsored by factory departments, are on sale now at all club outlets. "The Day at the Races" is for both members and their ladies. Tickets are $2.75 each.

The formal club program will start at 7:30 p.m. but couples are invited to be guests of Caliente and view the horse races, which start at 12 noon, from the clubhouse.

During the evening, the Caliente Clubhouse has been reserved exclusively for the Management Club. A filet mignon dinner will be served at 8:30 p.m.

Alkazin Appointed Loomis Assistant

J. J. Alkazin, executive, has been appointed assistant to the San Diego operating division manager, R. C. Loomis.



J. J. Alkazin

Alkazin headed Convair SD customer service until late in 1959 when he was placed on special assignment to commercial sales.

Following 14 years with American Airlines, Alkazin joined Convair at San Diego in early 1949 and shortly thereafter became manager of contracts and service. He is a 1931 graduate of MIT.

SD Transportation Now Near Gate 5

Convair SD out-plant transportation headquarters has moved from near the south end of Bldg. 4 to a new area near Gate 5 formerly reserved for supervisors parking.

The dispatch building, plus radio facilities, were moved and installed at the new location. Transportation's (Dept. 21) fleet of vehicles (including some 35 automobiles) will also be centered there. Its plant extension (1488) remains the same.

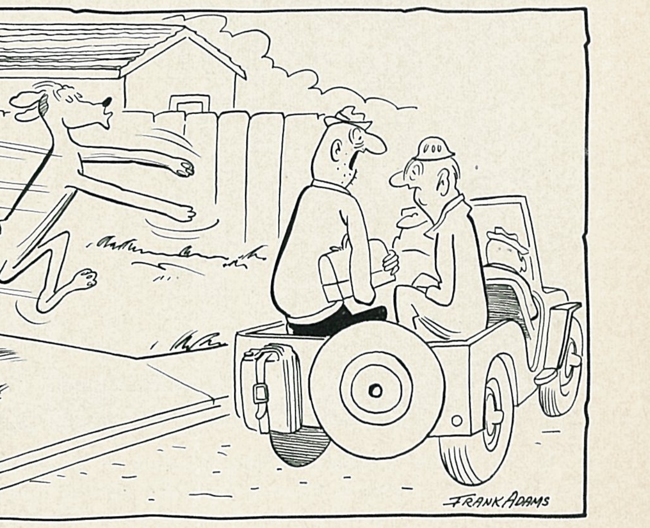
The relocation was necessitated to make additional area available so that two more stations could be added on the flight line for Convair's jet transport program.

Radio Call Letters Change For No. 1 880

Convair's first 880 has changed its radio call letters.

It is no longer known by the familiar "801 Tare Willy" which designated Convair's first jet transport well before it went into first flight January, 1959.

The 801 TW number, originally borrowed from the block of special numbers purchased for TWA planes, now graces the tail of a TWA 880 on the line at Convair SD. A new number, 8489H, has been assigned by Federal Aviation Agency to the No. 1 880, which is going into FAA certification as the first modified 880.



"I'm gettin' so I dread comin' home nights . . ."



A PERFECT MATCH—TWA hostesses, during familiarization course on conveniences and luxuries of Convair 880, combine their beauty with that of airplane. At top left Barbara Lux, Margaret Courtney, Gail Keyes, Ann Williams inspect footrest. At top right Nancy Velikanje and Deanna Johnson peer into storage rack. Below, center, Pat Anderson and Barbara Lux practice in galley. Even at off-hours picnic, 880 is discussed. In lower left, TWA Captain Leon Vestel demonstrates flying characteristics. At lower right is Convair 880 simulator, used to indoctrinate crews at TWA Flight Training Center in Kansas City, Mo. Shown are Captain W. H. Baumgartner at controls, and Art Ogilvie, manager of simulator maintenance and engineering.

Poll of TWA Passengers and Pilots Proves They Like to Fly Their 880s

Trans World Airline pilots, hostesses, ticket agents, baggage handlers—and, most important, passengers coast to coast—LIKE the Convair 880 SuperJet.

They like to fly it and like to ride in it.

This is what R. L. Runnalls of Convair SD engineering flight test discovered after an exhaustive week, most of the time spent aboard 880s flying from New York to San Francisco and all points in between.

He interviewed literally scores of people during the first audit of 880 performance and operation procedures since Convair jets went into TWA service a little more than two months ago.

"Because the plane is new to TWA routes, we had anticipated many questions, and perhaps, complaints. I was flattered for Convair that there was practically no criticism whatsoever from pilots on the 880's performance or flight characteristics, pointing up an excellent training program and smooth integration of the plane into service," he said.

"Without exception, pilots appreciate and heartily endorse flight characteristics and performance of the plane, and say they'd rather fly the 880 than any other jet."

Runnalls, who heads up Convair SD's airline performance engineering group, was the only Convair man on a team of 14 aircraft and engine manufacturers, and TWA engineers on the semi-annual survey. He said he rode with enough crews to be sure he was getting a true sampling of opinion.

Typical pilot comments: "I like the maneuverability of the 880 . . . It's an excellent one-hand plane—a pilot can hold it steady in an approach pattern under gusty and windy conditions, and down to landing, with one hand on the throttle and one on the yoke (wheel) . . .

"The stability is good . . . You don't have to constantly concentrate on roll and heading control . . . There's no serious Dutch roll . . . It can go anywhere and do most anything in maneuvering . . ."

One pilot stressed the plane's fast acceleration: "You can jam the throttles to the wall and feel the power surging in . . . This is the greatest thing since the wheel." He was referring particularly to the flexibility of engine power made possible by General Electric power plants. The CJ-805-3 engine, lighter than those used in other jet transports, with its variable positioning stator vanes in the compressor, takes less time to accelerate.

"Every TWA pilot who hadn't yet flown an 880 was anxious and eager to be assigned to the Convair Superjet," said Runnalls. "And everywhere the feeling was that some of the minor system malfunctions which had shown up in first service shakedowns were strictly in the nuisance category and would soon be cleared up."

Even the inevitable departure delays and late arrivals due to smoothing out first flight schedules didn't bother TWA passengers. They brushed off these inconveniences with "Oh well, that's to be expected with new planes," and "This is nothing to delays we've had on other new planes."

Every one of the passengers contacted knew he was flying on an 880! In answer to Runnall's usual leading question, "Do you know what kind of a plane this is?" the universal answer was, "Certainly. This is one of TWA's new 880 Convairs, and how fast are we going now—I understand this is the fastest jet?"

Business men flying cross-country were glad the TWA 880s have extended jet service into more cities in all corners of the U.S.

They like the "club" atmosphere of the interior, the attractive decor with alternating colors breaking up monotony of a long passenger cabin. "It's much easier on the eyes than most of the jets we ride in," one remarked.

Passengers traveling tourist liked the wider seats and the chance of getting a two-seat location with the two-and-three across seating arrangement.

Convair's reputation as builder of the well-known 240-340-440 series has gone a long way to assure 880 passengers that they're riding in a safe plane, said Runnalls. "I heard one after another say 'I've had plenty of experience in Convair-Liners in rough weather and good, and when Convair builds a jet, I know it's going to be a good jet.'"

Without exception, there was a feeling among all the passengers that the 880, with its stiffer wing structure, is more rugged. "When we're in rough air, the wings sure don't flap!"

Everyone felt that they were really going places with the 880's steep climbout at takeoff. They like the sensation of unlimited power. And, as one said, "I like to see it get up and go in a hurry."



OFF TO NYC—Mr. and Mrs. George Fiske, Kennebunk, Me., chat with TWA Hostess Paula Daniels en route Kansas City to New York aboard Convair 880 SuperJet.



MORE 880s FOR TWA—Night scene in field operations at Convair San Diego shows 880s being readied for delivery.

'Shock Wave' on 880 Wing Proves Passenger Conversation Piece

Passengers and hostesses alike were fascinated by the visible shadow line across the wing indicating the shock wave when speed and light conditions were just right. Said Runnalls, "It proved a real conversation piece on many flights."



TRAVELER—Bob Runnalls, back at Convair SD after 13,000-mile jaunt, expressed himself as "happy" over opinions of pilots, passengers on TWA 880s.

After Runnalls leap-frogged over 14 flight legs from Idlewild Airport at New York to O'Hare Airport at Chicago, to Dayton, Kansas City, Phoenix, Los Angeles, San Francisco—riding the jump seat on the flight deck, and unoccupied seats in every part of different 880s—he had spent seven days in the air and traveled 13,000 miles gathering pounds of comments, the good and the bad, from everyone even remotely concerned with 880 operations with TWA.

"The praise outweighed complaints ten to one," he emphasized. "In fact, the study showed that the few minor details which would be better changed, can easily be corrected. In my opinion—and in TWA's, I'm certain—the evaluation was a definite satisfaction. Convair is justified in being proud to claim the 880 as one of the best planes it's ever produced."

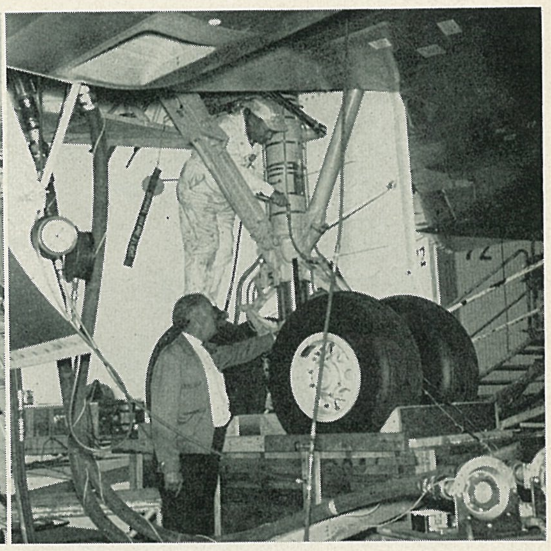
Instrument panel data gathered has been turned over to Convair flight data engineers for comparison with performance specifications and all other information was presented by Runnalls at a TWA debriefing in Kansas City, March 24.

TWA is now flying 12 Convair 880s and will receive the last of its order of 20 planes in August of this year.

Now Runnalls is looking forward to the same type of evaluation tours soon over Delta Airline and Northeast Airline 880 routes.







FUEL FLOW—Convair SD's first production 880-M, scheduled for delivery to Civil Air Transport, has completed 11 days of fuel system testing during which 100 gallons of fuel were pumped into each of five tanks and plane was positioned in 17 different attitudes—cycle was repeated 30 times until fuel tanks were full. In first photo, R. G. Lemke (Dept. 6), left, and R. R. Finch (Dept. 171) record flight engineers panel. At right L. W. Putney (Dept. 171) watches as A. D. Jennings (Dept. 171) "airs" struts to position plane. Civil Air Transport craft is now in field operations at SD Plant 1.

Cheaper by Tens

'Duty Rosters' Solve Problems For Two Biggest FW Families

Say you have 10 children—what else do you have?

A few headaches, of course. And you have a "duty roster" for the kids and make them stick to it.

And you have no dull moments.

Take the word of Convair FW's two biggest families: the Domenic Perricones and the J. R. Lopezes. There are 10 children in each. Both Lopez and Perricone, by coincidence, work in service engineering, Dept. 6-5.

John and Frances Lopez are parents of John Robert III, 17; Dorothy Marie, 14; Cecilia Ann, 12; Danny, 10; Rachel Marie, 9; Theresa Ann, 8; Rickey, 5; Annette Elaine, 3; Stevie, 19 months; and Katherine Lucille, 3 months.

Leonard Domenic and Mary Perricone are parents of Maria, 13; Patricia, 12; Marilyn, 11; Christopher, 9; Thomas J., 8; Karen Ann, 7; Donna Lou, 5; John M., 2; Domenic L., 17 months; and Tammy Michele, one month.

Frances Lopez says her biggest problem is "keeping peace in the family and stretching the budget."

Mary Perricone admits to some budget problems, too, and sometimes addresses a child by the wrong name.

Both families maintain a "duty roster" and each child has specifically-assigned chores. The older ones keep their own rooms tidy, make their own beds. Older youngsters in both families also help out with cooking, dishwashing and drying.

Both families are buying their homes. The Lopez home is at 912 Banks, in River Oaks, where they recently remodeled the garage into a bedroom-bath combination, and the back porch into a utility room.

The Perricones live at 3400 Meadow Oaks Drive, in Haltom City.

Dependents at FW Total Over 52,000

Convair's FW payroll supports 18,393 employees who have a reported total of 52,-304 dependents, according to data compiled by E. H. Langford, senior analyst in industrial accounting.

The 52,304 figure is ultra-conservative, Langford emphasizes, because so many employees do not take credit for all the dependents to which they're legally entitled.

Employees naming no dependents at all total 1,401.

Employees on Convair's FW payroll during 1960 earned a gross of $127,250,000, from which the payroll section deducted $16,720,000 in withholding taxes and $2,600,000 in social security taxes.

Taxi Ejection From Hustler Set For June

Ground ejection of an instrumented dummy from a B-58 speeding down an Edwards AFB runway at over 100 mph has been set for mid-June.

The test is part of a series of ground and air ejections leading to ejection of an AF volunteer at Mach 1.3—fastest controlled ejection ever attempted.

First of the tests at Convair FW resulted in a highly successful static ejection of a capsule from second station of B-58 Hustler No. 2.

Meanwhile, MB-1C pod No. 27 was undergoing modification for use in downward ejection tests, planned as a follow-on to the Mach 1.3 ejection.

"This pod is being structurally modified to carry both the B-58 and B-70 pods for downward tests," said C. C. Widaman, assistant project engineer.

All upward ejections—which will be made at both subsonic and supersonic speeds and at various altitudes—will be made from the specially beefed-up second station of Hustler No. 2.

No. 2 has been in down time for further modification. It was expected to make a shakedown flight last week.

Business Workshops Occupy Delegates

Convair FW personnel participated recently in two different small-business workshops.

M. L. Hicks, assistant manager-contracts and procurement, spoke to a procurement workshop sponsored by San Antonio Air Materiel Area at Kelly AFB.

E. E. Hatchett, Convair small business liaison officer and procurement manager, and R. B. Stangl, chief of vendor research and evaluation, were members of a subcontract counseling team to small business at a Tulsa, Okla., workshop.

Hobby Product

'Home Movie' About Standards Box Office Hit With Industry

A motion picture entitled "A Synthesis of Standards," produced by Convair Pomona's A. J. Chippendale Jr. (Dept. 6), is attracting considerable interest throughout industry.

The film, which Chippendale produced at home in his spare time, makes clever use of illustrations, charts and photographic know-how to explain standards and why industry needs them.

"I got the idea for the film several years ago, while I was supervisor of the engineering standards group," Chippendale said. "I was receiving numerous requests, both from Convair employees and others, to explain standards. To assist me, I prepared a series of charts and a few notes for a lecture. Then, since 16 mm movie photography is my hobby, I decided to make things easier for myself by preparing a film."

Chippendale started working on the film early in 1955. He prepared, with the assistance of Mrs. Chippendale, approximately 250 colored illustrations and drawings. He photographed these, edited them into a logical story, and added a magnetic sound strip. After several showings at Convair and at an Aircraft Industries Association meeting, he added some material to the movie as the result of suggestions received, and had two commercial copies made. Then he started receiving requests for showings of the film from other concerns. The film received publicity in the "Reliability Training Text," published in 1959 by the American Society for Quality Control and the Institute of Radio Engineers, and also in some Aero-Space Industries Association publications. Then the requests started pouring in.

"Last year I revised and updated the picture, and Convair had two commercial copies made to meet the demand," Chippendale said.

At present both copies are booked solid through September. Approximately 100 organizations, including missiles, aircraft and electronics manufacturers and various government agencies, have asked for the film to date.

Latest version of the film, incidentally, is narrated in part by J. A. Pomeroy (Dept. 7). C. D. Cornell, special assistant to the Convair Pomona manager, helped narrate the first version.

Chippendale, who at present is supervisor of the engineering specifications and technical data group, joined Convair in January, 1951. The son of a mining engineer, he was born in Mexico City, was graduated from high school there, and attended college in South Africa, receiving a degree in mechanical engineering. He served in the U.S. Army during World War II.



PRODUCER—Convair Pomona's A. J. Chippendale Jr., supervisor of engineering specifications and technical data, shows how he filmed 22-minute motion picture, "A Synthesis of Standards," which is currently in high demand throughout industry and governmental agencies.

B-58 Hustler Called 'Tremendous Plane' By Utah Senator After Mach 2 Hop

Sen. Frank E. Moss of Utah said the B-58 is a "tremendous airplane" which is "more flexible and performs better than any I've been in."

The statement followed the senator's recent two-hour, 15-minute flight in a TB-58 at Carswell AFB, during which the trainer Hustler reached Mach 2.

A colonel in the Air Force Reserve, Senator Moss said the B-58 could go anywhere in the world with in-flight refueling and should be kept for six or seven more years—maybe even longer.

"I'm hopeful the mixed weapons concept (missiles and manned aircraft) will prevail, and I think it will," the senator was quoted as saying.

A third wing of B-58s should be built to protect the nation until the B-70 is ready for use, he said.





STAIRSTEPS—At left is FW's J. R. Lopez family, from left, Mr. and Mrs., Katherine Lucille, John Robert III, Dorothy Marie, Cecilia Ann, Danny, Rachel Marie, Theresa Ann, Rickey, Annette Elaine, Stevie. At right is L. D. Perricone family, front row from left, Larry, Johnny, Donna, Karen, Tommy, Chris, Marilyn, Patricia, Maria. Behind are Mr. and Mrs., latter holding Tammy Michele.

Field Service Rep. Gets 'CV' Auto Tags

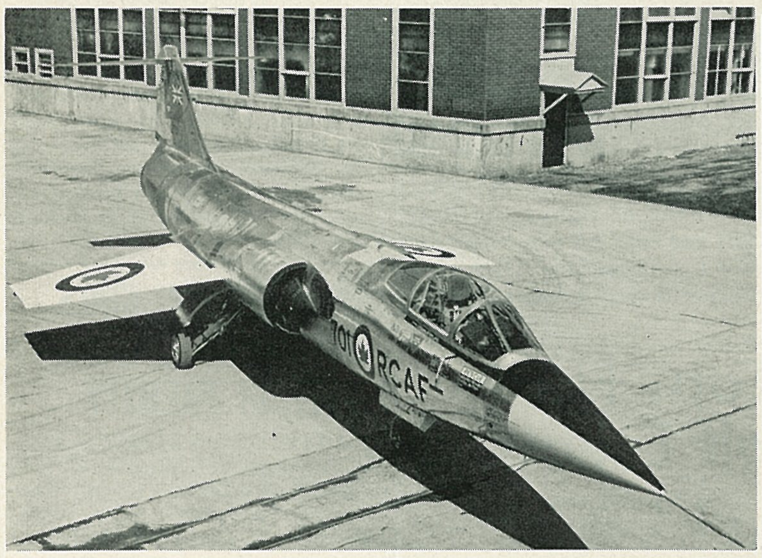
Court Zeiss believes in advertising—at least advertising the product he's dealing with, Convair 880s.

Zeiss, Convair SD field service representative based at O'Hare Airport, Chicago, Ill., now sports auto license plates marked CV 1880, closest he could get to 880. But he had better luck with his village vehicle tax sticker which came through with the right number—880.

NEWS FROM OTHER DIVISIONS OF GENERAL DYNAMICS CORP.

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.
Electric Boat of Groton, Conn., submarines.
General Dynamics/Electronics of Rochester, N. Y., Los Angeles and San Diego, Calif., telecommunications, electronic equipment.
Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.
General Atomic of San Diego, Calif., nuclear research, development, production.
Electro Dynamic of Bayonne, N. J., electric motors, generators.



NUMBER ONE—First of 200 CF-104s Canadair will build for Royal Canadian Air Force was rolled out on schedule last month at Canadair.

Canadair Builds CF-104, First of 200 For RCAF

MONTREAL—The first of 200 CF-104 supersonic strike-reconnaissance aircraft for the Royal Canadian Air Force was rolled out on schedule late last month at Canadair Limited.

First production model and a second aircraft to be completed in May will be taken to Burbank, Calif., for checking and flight-testing by Lockheed Aircraft Corporation, the plane's designer.

Third and all subsequent aircraft are to be test-flown at Canadair, starting in June. First deliveries to the RCAF are due in the fall.

Canadair CF-104 will be operated by the RCAF No. 1 Air Division, serving with NATO forces in Europe in a new strike-reconnaissance role. This requires the capability for all-weather flying at supersonic speeds and low or high altitudes.

The CF-104 can fly faster than twice the speed of sound, or more than 1,400 miles per hour, and climbs to heights of nearly 20 miles. Span of its stubby wings is only 21 feet, 11 inches, while the slender fuselage is 54 feet, 9 inches long. The powerplant is a General Electric J-79 turbojet, built under license by Orenda Engines, Limited. The J-79 produces a thrust of more than 15,000 pounds with afterburner.



AF VISITORS—D. C. Wilkens Jr., chief of industrial relations at Convair SD (third from left), welcomes group of AF officers, in training with industry at FW and Astro. From left: Maj. J. W. Hunter, Capt. R. J. Murra, Wilkens, Capt. J. F. Swearengen, Maj. Martin Kahel, Maj. G. E. Durbin, Maj. B. L. Green, Maj. W. C. Sprinkle.

Air Force Officers in Training At FW and Astro View SD Plants

Seven Air Force officers, in training with industry at Convair Fort Worth and Astronautics, spent a week at Convair San Diego last month to get acquainted with its operation.

During their bird's-eye-view of the plant they were briefed in various key departments: factory manager's office, engineering, industrial relations, labor relations, quality control, master planning, contracts, applied manufacturing research, and educational services, which coordinated the visit.

At the close of the week at SD operating division they joined the two AF officers assigned for this entire year at Convair SD, Maj. Jack Thacker and Capt. Henry Conner, for a week in General Office. They have now returned to their original Convair bases.

From Astro were Maj. J. W. Hunter, Maj. Martin Kahel, Maj. B. L. Green, and Maj. W. C. Sprinkle. At SD from Fort Worth were Maj. G. E. Durbin, Capt. R. J. Murra, and Capt. J. F. Swearengen.

Major Thacker and Captain Conner, who came to Convair SD last fall, have just completed a week in F. H. McLaughlin's factory manager's office and are now assigned to R. M. Hatcher's applied manufacturing research department. Last month they also spent a week at Convair Palmdale facility where they were introduced to the work program at that base by W. J. Martin, manager, and C. G. Oatman, chief of industrial relations.

New Hi-Fi Line To Be Offered At Discounts

General Dynamics/Electronics' new line of Stromberg-Carlson stereo-high fidelity consoles will be available to General Dynamics employees at special discount prices after May 15. Percentage discounts, varying with style and model, will be announced later.

Featuring lower and more compact styling than in the past, the new line will consist of six models, known as the "Young America" series. Standard prices will range from $200 to $500.

NEWS NOTES

Frank Pace Jr. will be awarded the eighth annual Gold Medal Award of the Metropolitan Amateur Athletic Union April 25 "for his long service to amateur athletics and his record as an athlete, sportsman and public servant."

* * *

A highly mechanized cargo handling and loading concept developed by Canadair and Flying Tiger Line for the CL44 swing-tail turboprop cargo plane makes possible an airplane turn-around time of one hour as opposed to five hours required by conventional hand loading methods.

* * *

Col. Henry Crown, a General Dynamics director and chairman of Material Service Division, has been named to the National Advisory Council for the Peace Corps.

* * *

Convair last year spent $936 million with suppliers, nearly one-third of it with small business concerns. Electric Boat spent $47.8 million for purchases in support of its submarine program, with small business suppliers receiving 43 per cent of the figure.

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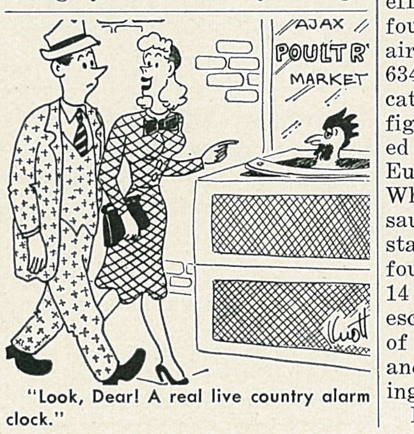
General Dynamics in 1960 paid $13,112,497 as the employer's share of Social Security taxes and $7,570,297 in unemployment insurance taxes. Totaling $20,682,794, these were the corporation's largest tax payments during the year.

* * *

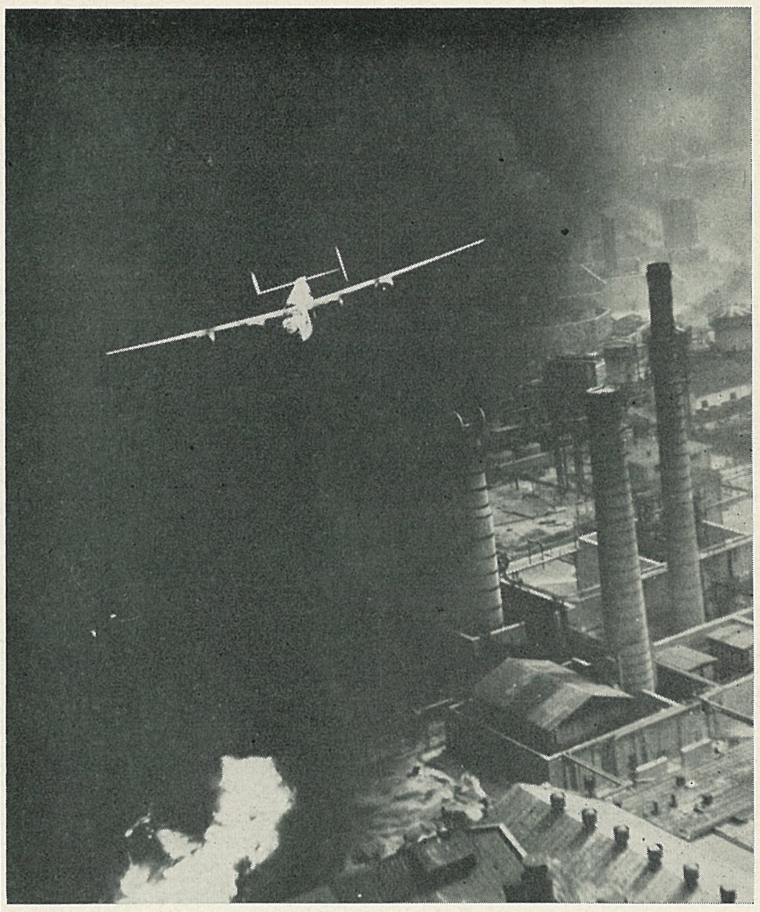
Sales Management magazine describes the corporate history, "Dynamic America," as "public relations used to the n-th power" and the exhibit off the lobby of the General Dynamics building as "its crowning jewel." The exhibit, based on the book, is open to the public daily at corporation headquarters, One Rockefeller Plaza, New York City.

* * *

George A. Franco, manager of the radio communication laboratory in General Dynamics/Electronics' research division, has won the second annual GD/E award for science and technology. The award, worth $2,000, was given in recognition of his work in developing new technique for high speed data transmission that is highly resistant to jamming.



"Look, Dear! A real live country alarm clock."



LOW DOWN—Fires from bombed oil refinery light up low-flying B-24.

Versatile

Though No. 1 Role Was Strategic, B-24 Also Used to Carpet Bomb

(Installment No. 57 of *Convairiety's* continuing history of Convair describes B-24's role in final aerial attacks upon Third Reich.)

March 4, 1944, brought the first U.S. bomber attack on Berlin, when one wing penetrated bad weather to hammer the Klein Machnow suburb. Two days later 660 aircraft attacked targets in and about the Nazi capital, losing 69 bombers and 11 escorting fighters in a savage air battle. U.S. crews claimed 179 enemy aircraft shot down, and air opposition was notably weaker in the follow-on raids of March 8 and 22.

From late 1943 to May, 1944, the weight of the 8th AF was thrown into Operation Crossbow, the Allied aerial effort to knock out V-bomb launching sites along 300 miles of French coast. Then, beginning in May, the heavies delivered thousands of tons of bombs on enemy rail centers and airdromes in preparation for the Normandy invasion. During the first week in June they joined in massive assaults on the coastal defenses of Hitler's Atlantic Wall. On D-Day (June 6), the 8th in an intricate pre-dawn assembly operation dispatched 1,361 B-17s and B-24s to plaster the invasion beaches, flying in formations of six squadrons abreast.

In the weeks that followed, missions often were tactical. Another masterpiece of intricate assembly work was accomplished for the St.-Lo breakout of July 25, when 1,507 heavies carpet-bombed an area ahead of the jump-off line, dropping 3,300 tons of bombs in 60 minutes.

But the 8th mission was primarily strategic, and after D-Day it concentrated on relentless pummeling of the enemy's synthetic oil industry, transportation network and aircraft plants. By December it could dispatch more than 2,000 heavies in a major effort. On the 24th it sent 1,400 four-engine bombers against 11 airfields east of the Rhine, and 634 more against 14 communication centers. The long-range fighter protection so badly needed in the early stages of the European war was plentiful. When the heaviest daylight assault ever made on Berlin was staged March 18, 1945, by 1,250 four-engine bombers, no less than 14 groups of P-51 fighters flew escort. By now great stretches of Hitler's capital were in ruins, and the Allied armies were closing in from two directions.

Lt. Gen. Carl Spaatz, commander of the U.S. Strategic Air Force, proclaimed the end of the strategic air war April 16, in a message to the commander of the 8th AF (Doolittle) and 15th AF (Twining). By May the 8th's heavies were ferrying liberated prisoners out of Germany, dropping food on the Netherlands, taking thousands of ground crewmen on aerial sightseeing trips over the broken Reich, or starting redeployment to the Pacific.

Ex-Pilot JAL Rep. For Sales

Japan Air Lines, which has placed orders for five Convair 880-Ms, has appointed Bal Shirgaokar as its first resident sales representative in San Diego.

Shirgaokar this month met with L. G. Lawson, president of the Convair SD Management Club, to discuss the possibility of the club sponsoring a two-week trip to the Orient. Lawson said the topic would be brought up at a future meeting of the club's board of control.

For the past three years a JAL resident sales representative in Los Angeles, Shirgaokar said the airline plans to operate its 880-Ms on runs from Tokyo through India and the Middle East terminating in Europe.

At present JAL has nine flights leaving the West Coast each week for Tokyo, according to the representative. Three flights depart Los Angeles and four leave San Francisco via Honolulu; two other flights depart Seattle and go by way of Anchorage, Alaska.

Shirgaokar was born in Bombay and at the age of 17 was a pilot in the Royal Indian Air Force where he rose to the rank of flight lieutenant (equivalent to captain in the U.S. Air Force). After finishing service, he became a flight instructor at Bombay Flying Club, later joined Air India.

He left India in 1949 and in 1952 graduated from the University of Southern California with a degree in commercial aviation administration.

Before joining JAL, Shirgaokar held positions with Trans World Airlines and Lockheed Aircraft Corporation. In conjunction with his JAL duties, he lectures on India and the Orient for civic and industrial groups. He is a member of the Aviation Committee of the San Diego Chamber of Commerce.

Convair-Astros Face Busy Slate Of Major League Softball Tilts

A tight schedule of tournament tilts faces Convair SD-Astro's combined softball entry in major league play as it faces top teams of the Western Softball Congress in a round-robin; begins pre-season play in the La Mesa ASA tourney; and heads for regular league play this month.

The Convair-Astros, made up of Astro and San Diego ball players, started the pre-season circuit by taking a tough 1 and 0 exhibition game from the Los Angeles Larks at the Los Angeles Coliseum March 26. The game was one of ten booked as Sportsman Show attractions to promote softball in the area.

Highlights included the one-hit shutout thrown by Bob Miller and a mighty blow over the Lark's centerfielder by Bill Doten for the only tally and one of three hits given up by Los Angeles pitchers.

The Convair nine went on to play the Alhambra Royals last Saturday night in Mayfair Park at Lakewood in a Western Softball Congress tourney which will end this Sunday night, April 16.

Contenders for this year's trophies are Long Beach Nitehawks, Gardena Merchants, Huntington Park Merchants, Whittier Impalas, San Pedro Mary Stars, Oxnard Merchants, Escondido Dolphins, Lakewood Oilers, the Royals from Alhambra, and the Convair team.

Play in the La Mesa pre-season schedule started this week at Helix Field in La Mesa and National City.

Schedules for regular league games in Western Softball Congress play, with openers April 28, will appear in the next issue of **Convairiety**. Spectators will be welcome at no admission charge.

Gift of $50,000 To Tri-Hospital Boosts Fund

A General Dynamics gift of $50,000 last week to the Tri-Hospital Building Fund brought cash payments on the fund drive subscriptions to more than two and three-quarter million dollars.

R. H. Biron, Convair vice president-administration, presented the check to Douglas Young, fund treasurer. The $50,000 is in partial payment of a $200,000 Convair pledge and largest corporate gift in the drive to add 442 new beds and other equipment at Scripps, Mercy, and Sharp Hospitals.

In addition to the corporate gift, almost 19,500 Convair people in the San Diego area are donating one day's pay each year for three years through a payroll deduction plan. Of these 10,877 are Astronautics employees; 8,-501, Convair SD hourly and flat-salaried and General Office hourly; and 96, General Office flat-salaried. Nearly $870,000 has already been paid into the Tri-Hospital fund since July, 1959, when the drive began. Donations are paid to the building fund at each pay period, and distributed on a monthly basis to the three participating hospitals.

Toastmasters' Club Elects Convair Men

Convair men figured prominently when Mt. Helix Toastmasters' Club installed officers March 29 at Ye Golden Lion.

Officers for the coming year include Charles E. Plummer, Astro Dept. 150-0, president; J. L. Johnson, Astro Dept. 531-3, administrative vice president; Ken Cummins, Convair SD Dept. 6, educational vice president; and Norman Wylie, Astro Dept. 521-1, sergeant at arms. Installing officer was Roy F. Ashe, director of budgets and estimating, Convair General Office.

The club meets each Wednesday at 7 p.m. at the Country Kitchen, Lemon Grove. Prospective members may contact Johnson at Astro ext. 2371 for additional information.

Swap Night Slated By Radio Amateurs

Radio hams at Convair SD will have a chance to sharpen up their horse-trading at the April 27 meeting of the Convair CRA Radio Club.

A special "swap night" is set for that night at the club's headquarters on Harbor Drive, said Jim Lack, CRA commissioner. All SD members and members of other radio clubs in the area are urged to bring their amateur radio gear and electronic parts for which they no longer have any use and barter them off for those they need.

Regular meeting of the CRA group will be tomorrow night (April 13) at 7 p.m.

Convair Wives Aid Clairemont Fashion Show Set April 26

Astronautics and Convair San Diego wives have assumed key roles for the April 26 fashion show of the Clairemont Woman's Club slated for 1 p.m. at the Hawaiian Village, Bali Hai restaurant, Shelter Island.

Proceeds from the show will go to the club's charity fund for distribution in June. Approximately one-third of the 112 members of the group are wives of Convair or General Atomic employees.

Convair wives to head important committees are Mrs. Henry G. Mileur (Astro Dept. 597), programs; Mrs. Robert C. White (Astro Dept. 581), publicity; and Mrs. John L. Saffer (Astro Dept. 321), tickets.

Among the hostesses is Mrs. David J. Jones (Astro Dept. 581).

Donation is $2.50. Tickets may be obtained through Mrs. Saffer at BR-8-3295 or Mrs. Vernon B. Rakestraw of the Convair SD engineering project office.

Entertainment will feature Star-Light Opera stars Mike Bogle and Kathy Proffitt, wife of Astro's James Proffitt of Dept. 531.

SD Team in First At Mountain Rally

Bert Wiest and Peter Aperlo of the Convair SD Sports Car Club teamed up to take the recent "Rally Around the Mountain" sponsored by La Jolla Sports Car Club.

Driving a Corvair, the San Diego pair, both of Dept. 6-03, drove the course without penalty points. The event is the only European style rally held annually in the San Diego area.

Seventy-five San Diego Sports Car members met March 26 for a breakfast rally to Live Oak Park in Fallbrook. During the day they participated in such competitions as spark plug and tire changes, under direction of Spud Riggs, rally chairman.

SQUARE DANCING CLASS TOMORROW

Novice square dancers at Convair SD will be welcomed at a new beginners class which will be held tomorrow (April 13) between 8 and 10 p.m. at American Legion Hall, 4061 Fairmount Ave.

Men especially are encouraged to get in the swing of things and enjoy the popular square dancing activity, according to Maury Scholz, CRA commissioner, who said women usually outnumber the men at classes.

Depending upon response, the present schedule of classes on Thursday nights will continue for about six months. Upon completion, students graduate to intermediate status.



GOOD LOOK—Display of Stromberg Carlson stereo sets in Astro cafeteria has attracted good number of visitors and drawn considerable favorable comment. Sets can also be seen at Convair SD employee services, Bldg. 32, Plant 1. Convair buyers can obtain discount on Stromberg sets. Most recent authorized dealer in San Diego is May Company.

Hawkins' 73 Tops Field At Convair Golf Event

More than 160 members of Convair Golf Club participated in the club's March sweepstakes held recently at Circle R.

Low gross winners in the 0-12 handicap bracket were Fred Hawkins, 73; Hal Napier and Dick Parmley, 74; Don Cheek, 75. Low net honors in this class went to E. E. McKenzie and John Sentovic, 67; Dick Hart, 68; and M. Ezell and Ed Vidovitch, 69.

In the 13-16 handicap class, Sam Ciolak's 77 was the best low gross round, followed by Ron Bruck, 82, and Jake Moore, 83. Low net scorers were Harry Bodwell, 67; Ken Eastin and C. C. Pope, 68; Gerry Dix, W. T. McCarthy and Bill Nicklaus, 69.

Joe Sanchez shot an 85 to win low gross in the 17-23 handicap bracket. Bob Selle was second with 86, followed by Craig Lent with 87. In this category, low net winners were Sam Graves, 64; Hank Billings, 66; and Joe O'Daffer and Ken Walker, 67.

A 90 card won low gross among 24-36 handicap contestants for Tobe Hunley, who was trailed by Hal Driscoll with 92, and Don Blake, 98. Low net golfers here were Lee Woll, 67; J. Jodka, 69, and Clark Saunders, 71.

Convair Men In Top Spots At Keg Event

Bowlers from Convair SD and Astronautics Management Clubs rolled off with seven of the top eleven team spots at the National Management Association Area Council Tournament March 18-19 in San Diego.

Spilling enough pins for a 3,080 total, the "Astro Planners" nailed down first place in the overall standings. Team members were J. Merk, C. E. Buchanan, P. E. Watson, I. E. Tucks, C. R. Martin.

Ranked third among the teams with a 2,991 total were the Convair SD "Golden Arrows." On this squad were E. V. Laird, Mel Schaeffer, John McMasters, Harry Lund, Ralph Weid.

Ninety-seven Southern California teams entered the tourney at Clairemont Bowl. Other top Convair squads and their scores were SD "Odd Balls," 2,978; "Astro Fordham," 2,950; "Astro 5," 2,945; "Astro Sycamore," 2,945; SD "Pod and Pylon," 2,924.

Convair Team Wins Table Tennis Play

A Convair SD team placed first last week at conclusion of league play in Industrial Recreation Council table tennis competition.

Sweeping straight sets in the finals were team members Ralph Cirillo (Dept. 179), Lee Majel (Dept. 171), Joe Brachamonte (Dept. 123), John Nichols (Dept. 292), Dick Lutz (Dept. 34-5). They will receive individual trophies.

Saturday Schedule For Salvage Yards

Salvage yard schedules at Convair SD and Astronautics for the next four Saturdays are:

SD—open April 15 and 29; Astro—open April 22 and May 6.

Yards at both Convair plants are open to employees on an alternating Saturday schedule.

Learn Spanish Via Telephone

Discount prices are being offered at Convair SD and Astronautics for a 28-day telephone Spanish course during the month of May.

The course concentrates on giving the beginning student a working knowledge of about 100 basic Spanish expressions upon which the student can expand and gain in proficiency.

Through CRA arrangements employee services at both Convair SD and Astro are offering a special price of $8 for the next course which starts May 1.

Detailed brochures and lease agreements for the copyrighted guide book are available at employee services.

The program emphasizes actual use of the language by combining a daily written lesson with a telephone instructor (on records) who repeats phrases in perfectly-pronounced Spanish.

Three Prizes Won In Fishing Contest

Catches of barracuda, trout and bass claimed the top three prizes in the March contest sponsored by Convair SD Fishing Club.

Melvin DeWalt (Dept. 137) took the $15 first prize with a 10-lb., 2-oz. barracuda; Joe Sapko (Dept. 25 retired) won $10 with a 16-inch trout; Ruth Menzie (wife of CRA Commissioner R. W. Menzie) placed third ($5) with a 3-lb., 2-oz. large mouth bass.

Revised Convair SD fishing contest rulebooks will be distributed at the April 18 meeting, 7:30 p.m., CRA Clubhouse, Gillespie Field.

Sq. Dance Refresher Course Offered

Astro Nauts, CRA square dance group, this week sent out a call for former square dancers interested in participating in a refresher course at Astro.

It begins April 18 and runs approximately 12 weeks, 8 p.m. each Tuesday night at Jackson's Clubhouse, Fairmount and Mission Gorge Road.

No advance registration is necessary, sign up at the April 18 or 25 sessions, Marty Stutz, commissioner, said.

Campster Building Being Reactivated

Convair SD and Astro sportsmen interested in building campsters are invited to attend the next meeting of Convair SD Fishing Club on April 18, 7:30 p.m., CRA Clubhouse, Gillespie Field.

Some 15 have already placed their names on a list of prospective builders and the campster construction program is being reactivated immediately, according to R. W. Menzie, SD CRA commissioner.

Universal-type kits, adaptable for mounting campsters on truck or trailer, will be sold at cut-rate prices to Convair participants who are invited to use working facilities at Gillespie Field.

HIGH SCHOOL GIRLS TOUR AT PALMDALE CONVAIR FACILITY

ANTELOPE VALLEY — Eleven Antelope Valley girls, all seniors at AV Joint Union High School, Lancaster, were hosted by Convair facility at Palmdale recently as part of the annual National Girls' Career Day sponsored by the Antelope Valley Business and Professional Women's Club.

Welcomed by George Oatman, chief of Palmdale industrial relations, the girls saw a film showing development of Convair's F-102 and F-106 jet interceptors. They then visited five different Palmdale departments to observe and take part in office procedure necessary to production and delivery of the planes. The girls' day was completed with a luncheon at the company cafeteria and a plant tour conducted by Oatman.

Margaret Rich, Palmdale employee and member of the sponsoring club, coordinated arrangements.

Industrial Tourney Open to SD Golfers

Astro and SD golfers are invited to play in the 19th annual Industrial Golf Tournament scheduled May 6-7, 13-14 at Torrey Pines (some of the higher handicap linksmen will play one round May 6 at Balboa Park Municipal course).

Open only to golfers with established handicaps, SD players can sign up starting today (April 12) at employee services in Bldg. 32, Plant 1, and Bldg. 4, Plant 2. Deadline is April 21.

A $3.50 entry fee should be posted at time of registration, said Ken Wulfemeyer, CRA commissioner of golf at SD, or Astro employee services, Bldg. 8.

Convair Kids Join Ice Hockey Team

San Diego will have its introduction to Pee Wee Ice Hockey when teams from San Diego and Pasadena clash at 1:30 p.m., April 15 at Iceland, La Mesa.

Many youngsters on the San Diego squad are sons of Astronautics and Convair San Diego employees.

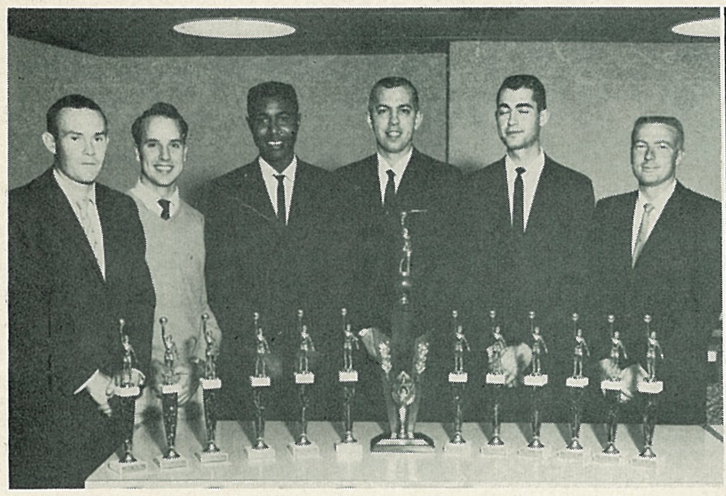
Admission for the game is $1 per person, and spectators may bring their skates for a session on the ice after play has been completed. No additional charge is made for post-game skating.

SD Golfers to Play Two Desert Links

Some 40 Convair SD Management Club golfers have already filled all available openings for 36 holes of championship golf May 6-7 in the Palm Springs desert resort area.

One round will be played at La Quinta Country Club and the other at Bermuda Dunes. Entrance fee for both rounds of this year's National Management Association Golf Tournament is $14 each.

For additional information, contact either Gerry Cox, ext. 468, Plant 1, or Curly Maxfield, ext. 694, Plant 1.







BUCKET BRIGADE—Some 100 basketball players from top teams in San Diego city and Convair competition attended awards banquet last month hosted by Convair in new cafeteria. In center photo (from left) are Convair SD's Pete Beyrer; Ralph Smith, supervisor of municipal athletics; Al Schuss, voice of the Padres, who was master of ceremonies; Gil Crosthwaite, CRA basketball commissioner. In photo at left are Convair SD's Industrial A champs (from left): Gordon Place, Dee Trepanier, Frank Miller, Bill Bullock, Dick Huntington, Curt James. At right are shop league champions: T. C. Johnson, W. L. Holmes, Bob Samano, Bill Holcomb, Herman Wright, Charles Mandragon, C. D. Nelson. More than 125 trophies were presented to outstanding athletes.

CRA to Discount Tickets For Circle Arts Musicals

A special treat is in store for Convair San Diego theater-goers this summer through arrangements of Convair Recreation Association and the new Circle Arts Theatre.

Discount tickets at 20 per cent reduction under regular prices will be offered Convair SD people to the inaugural season of eight Broadway musicals to be presented from May through September. The new theater is in final steps of construction north of Clairemont Mesa Drive, near Hwy. 395.

A block of 500 seats will be purchased by CRA for Convair nights at each production's first Sunday night performance. Reduced prices will be $2.72 for $3.40 seats; $2.20 for $2.75 seats; $1.80 for $2.25 seats; and $1.40 for regular $1.75 seats. Performances start at 8:30 p.m.

First Convair night will be May 28 to the "West Side Story," starring Larry Kert and Carla Alberghetti.

Other plays on the season's repertoire will be "Pal Joey," with Irene Manning and Bobby Van; "Silk Stockings," starring Juliet Prowse; "Fanny," with Billy Gilbert; "New Moon," with Peter Palmer in the lead; "Take Me Along," starring Jack Carson; "Plain and Fancy," with Margaret Whiting; and "The Pajama Game," with John Raitt.

The new circular theater seats 1853 around a central stage, 36 feet in diameter. No seat is more than 15 rows from the playing area, so that every location is advertised as a "good" seat.

Tickets will be on sale at SD employee services well in advance of each performance with announcements in **Convairiety** of sale dates to give everyone a chance to get the seat of his choice.

Coin Expert Will Address SD Members

F. S. Jones, San Diego numismatic expert, will tell Convair SD Coin Club members "How to Prepare Exhibits" at their April 20 meeting, 7:30 p.m., in Convair cafeteria executive dining room.

Well known among coin collectors in the San Diego area, Jones has served the last three years as chairman of numismatic displays for the Southern California Exposition and San Diego County Fair at Del Mar.

He also is president of the SD County Inter-club Numismatic Council and executive board member of the San Diego Numismatic Society.

Al Baber, club president, reminds all Convair SD members that they are invited to join the April 19 meeting of Astro Coineers, 8 p.m., in the Astronautics cafeteria, Bldg. 8. Both Convair groups will have an opportunity at that time to hear Adm. O. H. Dodson, USN (ret.), recount experiences with coin collectors in all parts of the world following his recent trip. Admiral Dodson is current president of the American Numismatic Association.

Glider Pilots Win Awards For Flights

Achievement awards have gone to Convair San Diego's top trio of glider experts for records established during the year, said Vic Korski, CRA commissioner.

John W. Williams (Dept 7-40); Duke Mancuso of Dept. 6, now based at Palmdale; and Sterling V. Starr, also Dept. 6, garnered the cash prizes given annually by the Glider Club for top performances in four categories.

Williams won both the goal flight and the "total hours flown" awards for a total of $40. In the National Championships, Williams accomplished his declared goal — from Odessa, Texas, to Andrews, to Wick, and back to Odessa—a distance of 134 statute miles.

For the most hours flown award, he logged a total of 116 hours during the year.

Mancuso received the highest altitude award for his flight to approximately 40,000 feet above sea level over Lone Pine, Calif., bettering his last year's record when he rose to 37,500 feet over Mojave, Calif., for an unofficial world's altitude mark. His prize was $20.

Starr took a $20 award for longest flight made by a Convair employee in a sailplane for his 285.5-mile glide from Pecos to Odessa, Texas, during the Nationals last August.

CRA *Sports & Recreation* Convairiety

Last Chance Until Fall For SD Ground School

Flying fans at Convair SD who would like to get their private or commercial pilot licenses can still enter the ground school course now under way.

Although the course is in its sixth week, newcomers can enter at any time and catch up as they go along, said Rex Robinson, instructor. Classes are held each Wednesday evening, 7:30 to 9:30 p.m., at Jim's Air Service, Lindbergh Field.

Sponsored by CRA, the 19-week free course prepares future pilots with all background and information necessary before taking the FAA examinations. First two weeks were spent in learning FAA rules and regulations; third, theory of flight. The class is now in the third week of navigation study, which takes four weeks. It will be followed by two weeks of radio navigation; five weeks of meteorology; a week of visits to control tower, weather bureau, communications bureau.

The last four weeks are devoted to an intensive review of all material, Robinson said, so that any part of the course missed can be presented again. Two complete exams, duplicating actual FAA examinations, are given during this time.

The present ground school, which ends about the first of July, will be the last this year until fall.

Anyone interested may attend tonight's class session or call Robinson at ext. 2265, Plant 1.

'IVORY CARVING' SUBJECT OF TALK FOR ROCKHOUNDS

Convair San Diego rockhounds will hear a talk on ivory carving at tomorrow night's meeting (April 13).

Fritz Jorrey will explain ivory carving techniques at the 7:30 p.m. session at Gillespie Field Clubhouse, said Dan Whorton, CRA commissioner. Anyone interested is urged to attend.

Convair rock hunting enthusiasts located specimens of a variety of minerals during their March 25-26 field trip to Boron. During the weekend outing they attended the third annual Gem and Mineral Show sponsored by the Mojave Mineralogical Society. Several joined the caravan of 100 cars of rockhounds from all over the state on the guided tour to the U.S. Borax Co. mine dumps.

New Shooters Make Convair Pistol Squad

Two new faces will be seen on CRA's Pistol Club team at Convair SD as E. E. Bickar and Ralph Picard shot themselves into the charmed circle with their scores during the last quarter.

They join Jim Halfacre (Dept. 180), long-standing team member, and Carl Hornburg (Dept. 139), who is rounding out a full year as one of the club's top marksmen.

The four, who will represent SD Pistol Club in all outside competition during the next three months, were chosen for their high scores in Short National Match events during the last quarter. Halfacre's aggregate score was 797; Hornburg, 789. Bickar (Dept. 215) was third with 767; Picard (Dept. 7), 747.

B. L. Broadway (Dept. 115) won both the .22 Police Course and .45-caliber Short National at the March 26 pistol matches. His score in the Police Course master class was 297; in the Short National, 283.

Halfacre with 259 and Hornburg, 259, came in second and third in the Short National.

Halfacre held another second in the master class with 290; Ash Bishop, CRA commissioner (Dept. 401-5), was third with 289.

In the expert class winners were: Bickar, 285; Picard, second, 278. Harvey Ingalls (Dept. 6) and Bill Ginsky (Dept. 6) both shot 251s in the marksman class, with Ingalls' four "Xs" earning him first spot over Ginsky's three.

Students Sought For Golf Classes

CRA at Convair SD is asking for a "show of hands" of those interested in taking group golf lessons at discount prices.

If scheduled, classes would be conducted on a weekday evening and limited to a maximum of 12 students. Two years ago golf classes proved to be a popular CRA attraction and price was $10 for six lessons.

Those interested are asked to call ext. 1705, Plant 1, and place their names on a list which is being compiled.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

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ARCHERY—April 20 meeting cancelled. Next event will be May shoot.

ASTRONOMY — Meeting Friday (April 21) 8 p.m., CRA Recreation Area, Gillespie Field.

BADMINTON — Open play Tuesdays, 7:30 p.m., Federal Bldg., Balboa Park.

BRIDGE CLUB—Sessions now held each Tuesday night, 7:30 p.m., Barcelona Hotel, 326 Juniper St.

CHORALAIRES — Rehearsals each Monday, 7:30 p.m., CRA Clubhouse, Pacific Hwy.

COIN CLUB—Meeting April 20, 7:30 p.m., Convair cafeteria executive dining room. Joint meeting with Astro Coineers April 19, 8 p.m., Astro cafeteria.

FENCING—Workouts and instruction each Friday night, 7-10 p.m., downtown YMCA.

FISHING—Meeting April 18, 7:30 p.m., CRA Clubhouse, Gillespie Field.

GARDEN CLUB—Meeting tonight (April 12), 7:30 p.m., Floral Association Bldg., Balboa Park. Speaker, Mr. Romero of Unimart garden supplies talking on landscaping.

GOLF — Registration open to reduced-price golf lessons. Call 1705, Plant 1. Industrial Golf Tourney May 6-7, 13-14, Balboa Muni and Torrey Pines courses. Entries taken at SD employee services until April 21.

JUDO—Workouts and instruction every Thursday in CRA Clubhouse, Pacific Hwy., 7-8:30 p.m.

MODEL RAILROAD — Meeting, 7:30 p.m., April 14; "O" scale operation, 7:30 p.m., April 21, House of Charm, Balboa Park.

MOVIES—Reduced-price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB — Next shoot April 23, 9 a.m., San Diego Police Pistol Range, Federal Blvd. & Home Ave.

RADIO CLUB—Next meeting tomorrow (April 12), 7:30 p.m., Radio Club Headquarters, Harbor Drive. Swap night April 27.

ROCKHOUNDS — Meeting tomorrow (April 13), CRA Clubhouse, Gillespie Field, 7:30 p.m.

ROLLER SKATING — Skate night, Monday (April 17), Skateland, Front and G Sts. Free tickets at employee services.

SKI CLUB — Trip to Mammoth this weekend, April 14-16. For information call Gary Witt, ext. 2484, Plant 1.

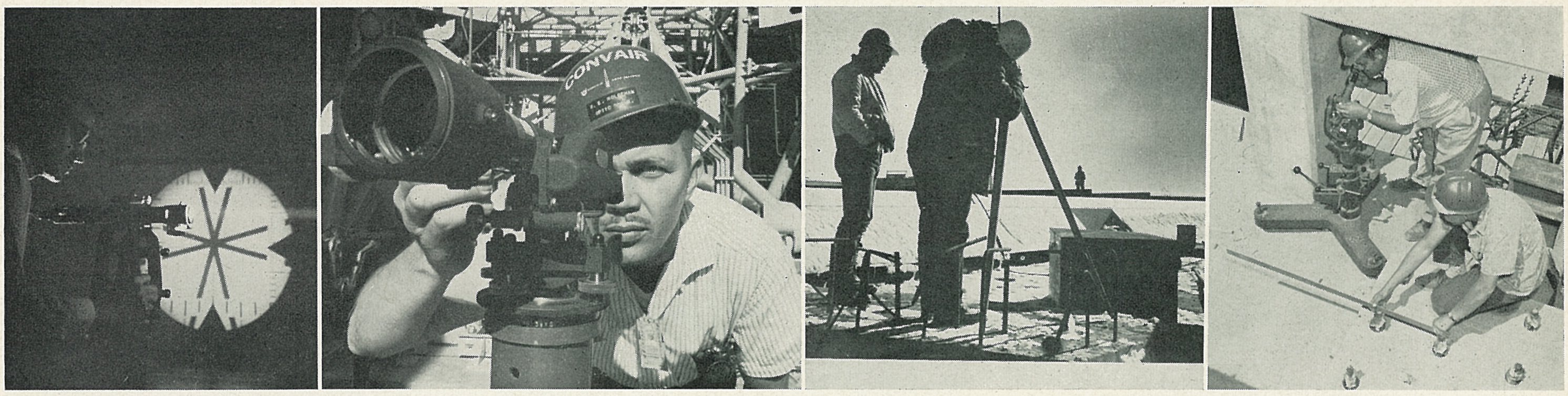
SOFTBALL — Organizational meeting for shop softball team April 13, 5 p.m., CRA Clubhouse, Pacific Hwy.

SOLO FLYERS — Registration still open for ground school, Wednesdays, 7:30-9:30 p.m., Jim's Air Service, Lindbergh Field. Call Rex Robinson, ext. 2265, Plant 1.

SQUARE DANCING — Registration still open to beginners' class tomorrow (April 13), 8-10 p.m., American Legion Hall, 4061 Fairmount Ave.



COUNCIL MEETING—J. K. Field (standing), SD chief of employee services, addresses meeting of Convair SD Recreation Association Employees' Council. Group elected new officers last week to guide sports and recreation activities during 1961-1962 term.



DOING IT RIGHT—Optical tooling equipment plays big part in seeing that Atlas bases are accurately built. At left E. J. Barnett of applied manufacturing research uses calibration device to check field equipment. In next photo R. E. Holdeman, tooling assistant foreman at Offutt AFB, establishes horizontal reference. At far right Bruce Smith and Augie Semindinger line up installation at Vandenberg. Conditions aren't always perfect, particularly in winter (second from right).

Optical Surveillance Teams Keep Careful 'Eye' on Site Construction

Optical tooling, an intricate art of painstaking accuracy usually practiced only in ideal factory conditions, has been carried far afield by Astronautics.

Two-man optical surveillance teams serve each Atlas launch site and their job is to insure correct alignment of all missile ground support equipment. As construction progresses they constantly check and recheck. They must think in terms of thousandths of an inch, for a one-degree error at the bottom of a silo launch site (180 feet below the surface) would be magnified to a yard error at ground level.

Specially trained at San Diego, each team uses a package of instruments with such names as "jig transit," "collimator," "prismatic stride level." All basically are telescopes. At a distance of ten feet they make a human hair appear the size of a pencil lead.

Simply expressed, optical equipment is used to establish a reference point in space. Everything else is then positioned in relation to this point—right or left, up or down, before or behind.

Before the men take to the field each tool is precision-calibrated at Astronautics' optical calibration laboratory, using a special projection device designed by E. J. Barnett of applied manufacturing research (Dept. 290-2).

In the field, instruments are subjected to tortuous conditions.

At some sites, temperature changes from zero to 40 degrees have been experienced in less than an hour. At others, warm, humid air has a corrosive effect.

Because of these problems, constant checks are run on each instrument in use, at small calibration labs at each missile base.

Astronautics Life Science Center Will Serve All Convair Divisions

Formation of a new Convair Astronautics life sciences research section to study all medical, psychological and human engineering factors affecting man in space has been announced by Mort Rosenbaum, Astronautics chief engineer.

The Astronautics group will coordinate related studies at all Convair operating divisions to facilitate interchange of research information for development of advanced capabilities in the life sciences field.

In addition, it will coordinate all Convair life sciences programs with those of other General Dynamics Corporation divisions, particularly Electric Boat which is active in development of life support systems.

While most of Convair's life science personnel and equipment will be concentrated at Astronautics for the use of all divisions, each operating division will retain sufficient manpower to support individual in-house programs.

Only major shift of personnel is the already-completed move of six medical and engineering personnel from San Diego operating division to Astronautics.

The life sciences section (Dept. 594-0) is headed by Dr. R. C. Armstrong, reporting to Dr. H. F. Dunholter, assistant chief engineer—development. Dr. Armstrong, a physician and design engineer, has served as Convair flight surgeon since 1956. He headed up Convair SD's aerospace medicine group before transferring to Astronautics in his present capacity.

Dr. Armstrong is also acting head of the life sciences section's aerospace medicine group (Dept. 594-3) which will concentrate on all medical and biological problems of manned flight, both in the earth's atmosphere and in space.

Two other groups within the new section are human factors engineering (Dept. 594-5) and life support engineering (Dept. 594-7).

Human factors engineering, headed by W. E. Woodson, will deal with psychological problems of flight, human comfort and effectiveness, and related subjects. The human factors group of reliability (Dept. 598) will, however, retain its present responsibilities on existing projects in this area.

Life support engineering is headed by J. O. Tearnen, and will specialize in analysis and experimentation leading to development of systems and subsystems for the support of human life in a controlled environment. At present, this includes plans for testing atmospheric control, water, and other life support subsystems within the full-scale MARS space station mockup at Astronautics (**Convairiety**, March 1).

In announcing establishment of the new section, Rosenbaum described the life sciences section as filling a unique need in space age industry.

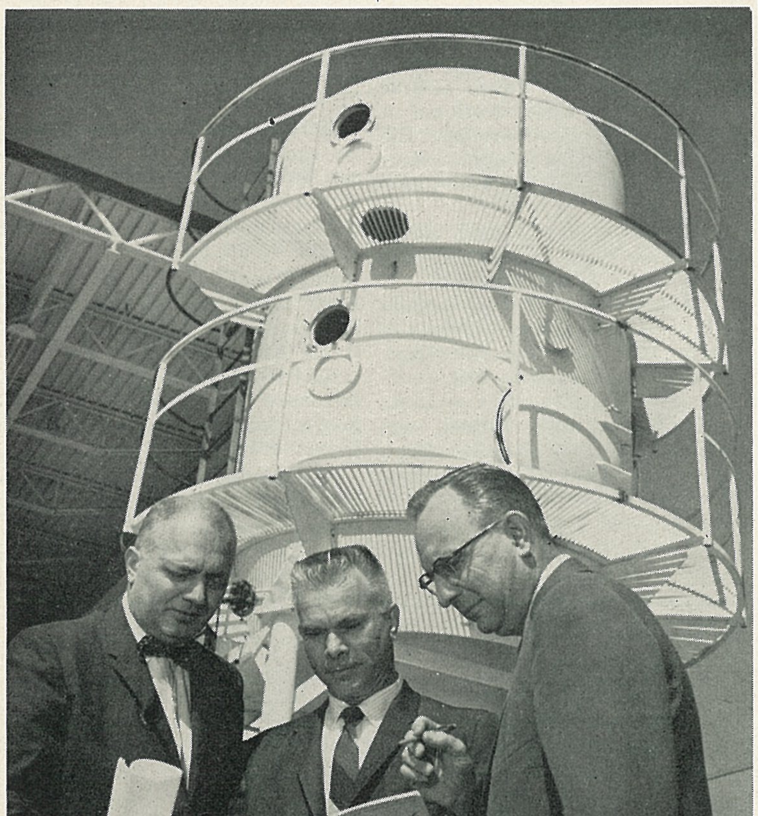
"This organization provides a central group with extraordinary talent and facilities for solving the more advanced and complex problems in the design of space vehicles," he said.

Trio From SD Attend Safety Conference

Three Convair San Diego men were among more than 200 military and industry representatives from the United States and Canada attending the 46th Air Force-Industry Safety Conference at Riverside, Calif., last month.

H. W. Callihan, senior propulsion group engineer; R. V. Shields of SD engineering reliability; and Don H. Scott, Convair field service representative based at Norton AFB, participated in jet engine safety discussions during the three-day closed session on turbine propulsion systems.

The annual conference is sponsored by the Deputy Inspector General for Safety, Headquarters USAF.



CENTER AT ASTRO—Pictured in front of space station mockup are, from left, William Kudenov, MARS project leader; Dr. R. C. Armstrong, head of life science section; W. E. Woodson, head of human factors engineering.

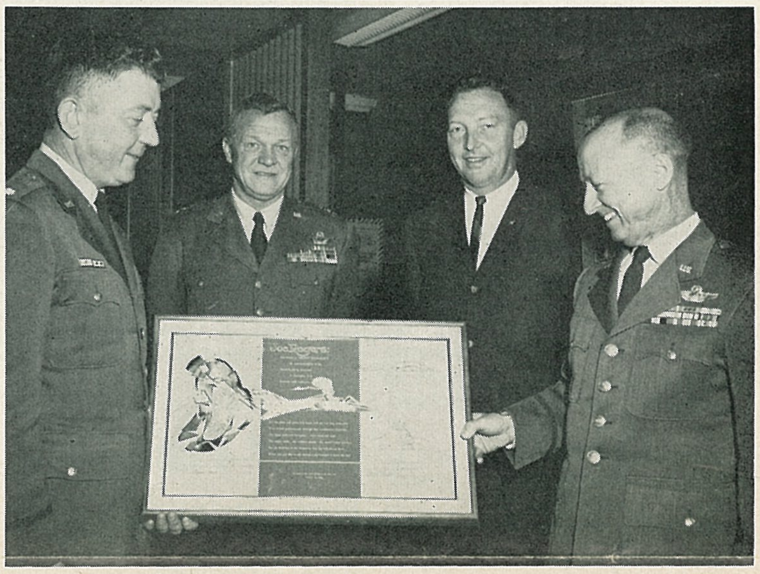
SD Management Club Votes $100 to Fair

Convair San Diego Management Club has voted a $100 contribution to the seventh annual Greater San Diego Science Fair scheduled April 15-18 in Balboa Park.

According to P. A. Terry, executive director, a primary purpose of the fair is to acquaint the public with the needs of industry for increased training in the field of science.

Chairman of the board for the non-profit organization is J. R. Dempsey, Convair vice president and manager of Astronautics operating division.

Last year, the San Diego Fair was largest in the nation, including participation by some 40 preliminary fairs in the county. Exhibits will be located in the Balboa Park Federal Bldg.



SPECIAL AWARD—Lt. Col. Joe Rogers (far left) gets special Convair-designed certificate recalling in humorous vein and verse arduous preparation for F-106 world speed flight over Edwards AFB, December of 1959, at March 23 presentation of Federation Aeronautique Internationale certificate acknowledging 1,525.95 mph record. At Anchorage, Alaska, ceremony, others in above shot are Maj. Gen. C. F. Necrason, commander Alaskan Air Command; Rex Warden, assistant director Convair military relations; Col. Charles D. Chitty, commander 5070th Air Defense Wing.

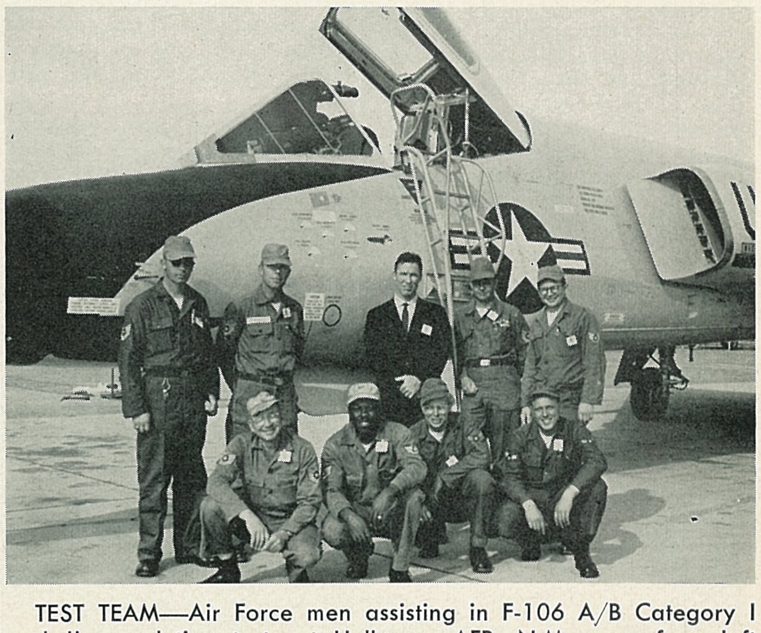
Score of F-102 Deltas Join Air Defense Of Netherlands at Camp Amsterdam

Convair jet interceptors now based with the 32nd Fighter-Interceptor Squadron in the Netherlands were formally introduced at a press party recently at Soesterberg.

"The 20 Delta Daggers mean a great reinforcement of the Netherlands air defense," said Gen. Frederick Smith Jr., in charge of the USAFE West European sector, as he turned over the command to Lt. Gen. H. Scheper, chief of Netherlands Air Force. The 32nd FIS, based at Camp Amsterdam, is the only European AF squadron not directly under American command.

Officials from 86th Air Defense USAFE headquarters, 17th AF headquarters, Dutch Air Ministry, and the Royal Dutch Air Force heard General Smith symbolize the activation of F-102As under Netherlands control as a "token of traditional friendship between the two countries."

Convair was represented by Charles Tuck of the Geneva Office; C. H. Clements, who directs Convair support of European F-102 squadrons; field service representatives, J. E. Dodge, H. R. Vinz, E. M. Gross; N. A. Picard, logistics support representative.



TEST TEAM—Air Force men assisting in F-106 A/B Category I and II completion tests at Holloman AFB, N.M., are, from left (front row), T/Sgt. George Raine, S/Sgt. James Dunn, A2c James Lauritsen, and A2c Charles Peterman; (back row) T/Sgt. Donald Coonts, flight chief; T/Sgt. Darrel Rains; Bill Strader, Convair SD field service rep; T/Sgt. Lewis Buchanan; and S/Sgt. Thomas Lynn.

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SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.

Major Mate, Final In Hot Competition

A hot and heavy battle is waging in Depts. 148 and 160 at Convair SD Plant 1 to see which area can keep the cleanest "house."

Organized by departments themselves, the contest centers around two life-sized plywood trophies, "Mr. Clean," and "Mr. Crum." "Mr. Crum" goes each week to the section which rates the poorest housekeeping score. By the same token, "Mr. Clean" presides over the area judged the best.

All of jet transport major mate and final assembly stations in Bldgs. 2 and 3, paint station and paint shop are competing.



CRUMMY?—Barbara De Soto (Dept. 160), lower shot, sweeps around "Mr. Crum," housekeeping booby prize for jet transport production areas. In upper shot, Ed Rinks, paint shop assistant foreman, shows off "Mr. Clean," which goes weekly to cleanest section.

Mfg. Control Leads List For Housekeeping in '61

Manufacturing control at Convair San Diego Plant 1 is leading all departments in housekeeping standings at the end of the first quarter of the year.

It stood at the top of the list in January with a .002 score based on violations per employee. In February and March it had a perfect record with no violations. Average plant score for the first month in 1961 was .021.

Material department had no violations in February and March. Other perfect scores were chalked up in February by jet transport field operations and electronics; in March by tool manufacturing, plant engineering, and transportation.

Leading the field in the monthly safety contests is material (Dept. 34) with no doctor's cases for two months in a row. No injuries were recorded in January from manufacturing control; experimental; Model 8 final, major, primary, field operations; jet transport wing and aft fuselage; jet transport mockup; tubing; and electric bench. In February material was the only one without a doctor case. In March material, plant engineering, transportation, tool manufacturing kept the record clean.

Every area in Plants 1 and 2 is judged each month on overall cleanliness, fire violations, safety in the housekeeping contests, explained M. C. Val Dez, chief safety engineer. Inspections are made without warning.

Judging is made on general appearance and tidiness—clean floors, coats, lunch and tool boxes in their proper places. Fire extinguishers in accessible locations, fire sprinkler heads clear, volatile liquids in safety containers, and rubbish and trash cleared away are points to the good. Unsafe equipment, eye protection, condition of stands and ladders all count 10 points per violation.

In the monthly safety contests, departments are scored on number of doctor's cases reported during the period.

* * *

FLYAWAY FACILITY SETS SAFETY MARK

An unofficial safety record is the claim of Dept. 271 at Convair San Diego which has gone three years and some 250 days to the present time without a disabling injury.

Dept. 271 is the Convair F-106 field operations team which has been in charge of ferry flights from San Diego to Palmdale for F-102 and F-106 jet interceptors.

"This record is definitely exceptional because of the nature of the flyaway program and Dept. 271 is to be commended," said a Convair SD safety engineer.

At the height of the program there were more than 300 in the department and as many as 13 planes were ferried to Palmdale in one day.

Two Convair SD men, E. F. Custenborder and Fred Werner, have been associated with the field operations activity since start of the F-102 program in 1955, all the way through to phasing out of the F-106 at the present time.

Convair Sons, Daughters Win Scholarships

Eight of the 12 General Dynamics Corporation Merit Scholarships for 1961 have gone to Convair sons and daughters to assist in their college educations. Five went to boys and three to girls.

Each Convair operating division had two winners in the first annual scholarship program incorporated under the National Merit Scholarship Corporation, said J. L. Budros, assistant to Convair vice president-administration. This program supplants the former Convair Sons Scholarships.

Winners announced this week are:

Convair San Diego—Paul Alfred Langlois, son of A. P. Langlois, applied manufacturing research supervisor (Dept. 190-2); and Clifford Lloyd Meland, son of Lloyd Meland of Dept. 101.

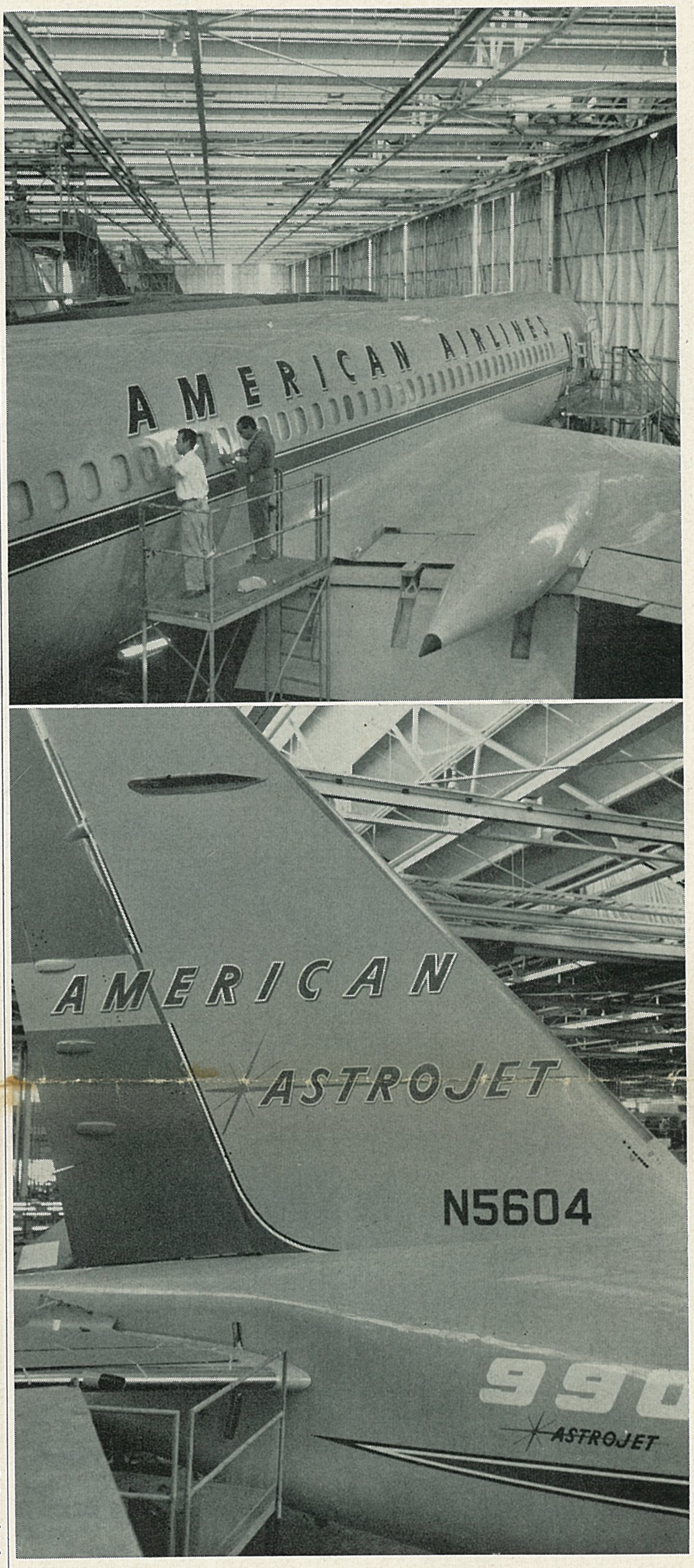
Astronautics—Patricia Enid Schraud, daughter of May R. Schraud (Dept. 321-0); and Alan Thomas Herring, son of G. T. Herring Jr., Dept. 553-5.

Fort Worth—S. Dianne Middleton, daughter of Shirley J. Middleton, Dept. 24-7 tool engineering control supervisor; and John Michael Taylor, son of J. C. Taylor, Dept. 6 senior design engineer.

Pomona—Betty Dawn Shaeffer, daughter of R. A. Shaeffer, accounting coordinator in Dept. 10; and Alan William Bock, son of William Z. Bock, process engineer in Dept. 27.

All young people are top students in their senior classes and stood at the head of the list in National Merit Scholarship qualifying tests. Individual awards will range from $250 to the $6,000 maximum apportioned over four years of college work. Actual amounts are determined by each

(Continued on Page 2)



PRETTY BIRD—These first photos of 990 to bear stripings of customer airline were made last week in Bldg. 3 at Convair SD Plant 1.

Greater CIP, ES Volume Needed to Meet Goals

Employee Suggestions and Cost Improvement Proposals have saved $224,550 at Convair San Diego during the first quarter of 1961.

Direct departments have accounted for $153,872 of the total; indirect departments have saved the remaining $70,678.

"It is becoming evident that the quality and quantity of cost reduction ideas must increase if departments are going to match goals set for them," said A. E. Andress, manager of systems and procedures, and data processing.

"A few departments have already exceeded goals assigned them, but most areas are not keeping pace percentagewise with their year-end targets," he added.

The total operating division savings goal is $2½ million, which in turn, has been broken down into separate targets for each department.

Top two direct departments at Convair SD are 129 (plastics and trim) and 119 (metal bond fabrication and assembly). The former has already overshot its goal of $25,000 by 154 per cent. Dept. 119 is way past its $10,000 by 181 per cent.

Ranked third among direct departments is 117 which has saved almost $8,000 of its $10,000 target. Other direct departments ahead of their time schedule in the savings program are 140, 146, 135, 136 and 137.

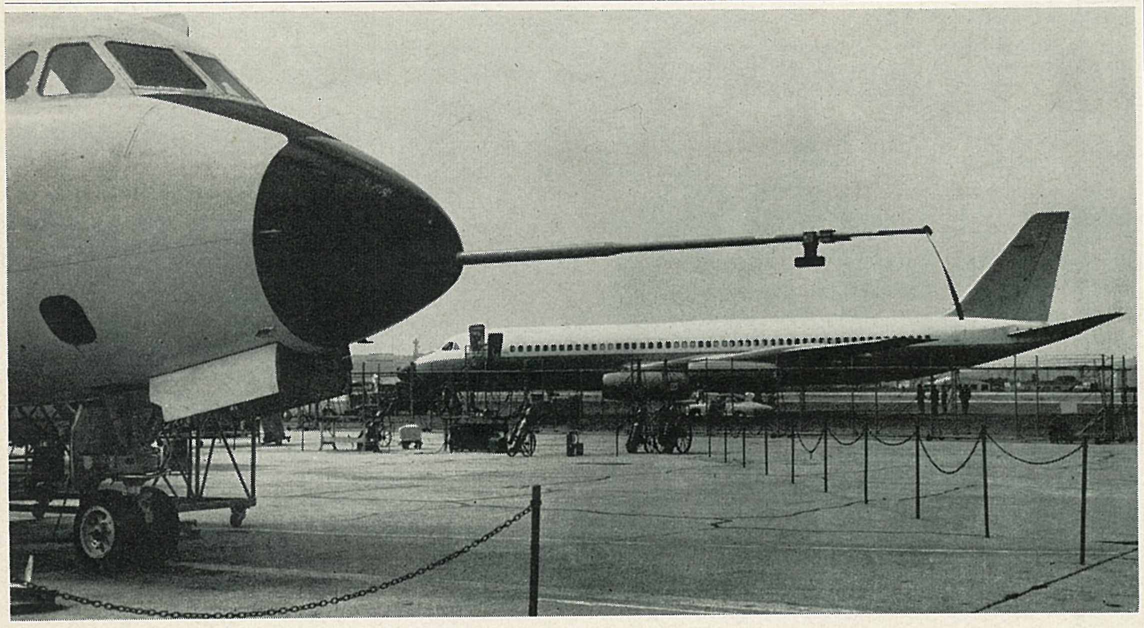
(Continued on Page 2)

990 No. 1 Successful On Return to Flight

Convair SD's 990 No. 1 went aloft for a three-hour cruise last Thursday (April 20), its first flight since incorporation of a pod and pylon modification.

The modification was completed two days ahead of schedule.

Single flights on Friday, Saturday and Sunday followed. Don Germeraad, chief engineering test pilot, was at the controls. The plane successfully cleared the first series of tests.



FRAMED—Long "nose" of Convair 880-M in field operations frames Convair 990 No. 2 shortly before newest Convair jet transport made maiden flight on March 30. Shortly after photo was made, Pilot John Knebel took 990 up for successful two-hour flight.

Log Book Entries

Promotions

SAN DIEGO

Promotions to or within supervision effective April 10.

Dept. 4-0, Material Office. To material operations manager, G. W. Zahrte.

Dept. 6-21, Engineering: To engr. adm. group supervisor, R. H. Thatcher.

Dept. 10-0, Commercial Contracts: To manager of contracts-commercial, F. S. Chambers Jr.

Dept. 11-1, Contracts: To contract administrator-military, J. C. Parker III.

Dept. 44-7, Material Control: To material control asst. supervisor, V. C. Holt Jr.

Dept. 119, Metal Bond Fabrication & Assembly: To asst. foreman, J. E. Denham.

Dept. 133, Jet Transport Door Assembly: To asst. foreman, J. T. Evans Jr., E. L. Phillips.

Dept. 140, Pod & Pylon Assembly: To asst. foreman, L. Copeland.

Dept. 141-2, Jet Transport Delivery Preparation: To foreman, W. J. Enlund.

Dept. 145, Jet Transport Wing Structure: To foreman, H. G. Rexroad.

Dept. 146, Jet Transport Wing Primary & Wing Mate: To asst. foreman, W. E. Linberg.

Dept. 160, Jet Transport Final Assembly: To asst. foreman, E. E. Rinks, R. E. Sands, L. W. Schmitz Jr.

Dept. 188, Inspection, Plant 1: To inspection asst. supervisor, L. E. Austin, E. L. Cain.

Dept. 192, Manufacturing Control, Plant 1: To superintendent, J. I. Luckett (eff. 3/27/61). To M/C asst. foreman, W. R. Killeaney, J. J. Tessary, V. L. Waitman.

Dept. 197-8, Quality Control: To inspection asst. supervisor, D. C. Gonzalez.

Dept. 279, Model 8 Post Production Service: To asst. foreman, R. D. Coartney.

Dept. 400-2, Tooling: To tool project supervisor, R. L. Bolick. To tool project engineer, G. F. Lacy. To asst. tool project engineer, J. E. Miller, C. W. Stafford Jr.

PALMDALE

Dept. 321-1, Field Operations: To asst. foreman, E. L. Fetzer.

Service Emblems

SAN DIEGO

Service emblems due during the period April 16 through April 30.

Twenty-five-year: Dept. 6-31, C. A. Gerber; Dept. 120-0, J. R. Benedict.

Twenty-year: Dept. 1-18, P. R. Hurley; Dept. 6, Robert Bigler, S. R. Milis, G. M. Stetsuk, H. N. Sylvester, B. J. Tanonis; Dept. 15-5, R. F. Fowle; Dept. 31, J. B. Bence, R. E. Brown, C. S. Rosefeld; Dept. 34, C. F. Ratcliffe; Dept. 95, E. L. Brown; Dept. 144, F. P. Lessle; Dept. 400, W. H. Pegler; Dept. 401, V. L. Brook, J. L. Valverde.

Fifteen-year: Dept. 6, H. G. Davenport, D. K. Faulk, R. C. Rice, R. R. Wahler; Dept. 25, R. F. Bonner; Dept. 31, W. M. Young; Dept. 115, A. H. Landers; Dept. 128, Odilia R. Bracey, Sarah B. Huggins; Dept. 197, J. E. Campanella; Dept. 216, Martha E. Bjornson, R. W. LaRue; Dept. 292, F. W. Dean.

Ten-year: Dept. 1-23, C. O. Martin (due 4-3-61); Dept. 3, L. G. Avritt, A. J. Bahl, D. L. Spencer, R. J. Turner; Dept. 6, Marguerite S. Goggin, J. P. Moore, A. F. O'Brien, H. A. Peterson, E. I. Seiden; Dept. 7-10, L. M. Barnes; Dept. 14, Rosalie Hamlet, Ora S. Havel, A. E. Mantey, Carmella D. Ohlin; Dept. 15, T. Saint Sing Jr.

Dept. 21, S. A. Hussey, R. E. McLaughlin, Jose Mejia Jr. (due 2-1-61), R. W. Raedel; Dept. 25, C. C. Cordell, G. J. Edwards, A. R. Magre, Gustav Schmitt-Mitt; Dept. 34, R. L. Davis, M. F. Neuber; Dept. 44, Leona S. Lyons; Dept. 97, Marguerite H. Eby; Dept. 100, E. O. Johnson; Dept. 101, Katherine K. Maxwell.

Dept. 110, R. M. Trammell; Dept. 116, Eleanor Diegan; Dept. 128, Mary G. Callahan, Hilda T. Cowan; Dept. 133, Ruby M. Melton, W. J. Salewske; Dept. 135, M. E. Stewart, P. V. Tippetts; Dept. 137, R. C. Kassell; Dept. 141, R. R. Castaneda, J. O. Lovell; Dept. 146, R. C. Adamson, E. R. Skaggs.

Dept. 160, S. W. Fung; Dept. 171, E. E. Wooten; Dept. 188, Eula M. Farnsworth; Dept. 192, R. M. Parrish, F. E Patterson; Dept. 197, Dorothy D'Ercole, L. W. Ellis, R. L. Trucks; Dept. 215, Mabel A. Bush, R. E. Russell; Dept. 218, Dolores R. Cabral, A. A. Ragonesi, B. P. Voss; Dept. 233, E. E. Nichols; Dept. 279, C. J. Nerz Jr.; Dept. 292, J. H. Gahagan, Evelyn A. Taddiken.

Dept. 400, H. M. Ross; Dept. 401, R. M. Cohea, C. E. Goldsmith, P. V. Jones, C. R. Kellogg, W. R. Lewis, Alexander Lutz, W. M. Overton, F. Q. Rabanzo R. K. Smith, P. L. Underwood, Anthony Vinuto (due 2-27-61).

HOLLOMAN AFB

Ten-year: Dept. 313-2, W. E. Mahan.

Retirements

SAN DIEGO

BOWLIN—William M., Dept. 6. Seniority date Nov. 7, 1950, retirement effective April 14, 1961.

BURKHOLDER—Edgar B., Dept. 192-7. Seniority date Nov. 22, 1955, retirement effective March 28, 1961.

BYRNE—Garland F., Dept. 292-1. Seniority date April 25, 1952, retirement effective April 7, 1961.

JONASSON—Max K. F., Dept. 401-5. Seniority date Nov. 16, 1951, retirement effective April 14, 1961.

MOXLEY — Stanley O., Dept. 401-4. Seniority date June 15, 1953, retirement effective April 3, 1961.

Personals

SAN DIEGO

My wife and I give sincere thanks to all of my many Convair friends for their flowers, cards, and expressions of sympathy due to the recent death of my father-in-law.

Eddie Wallin, Dept. 146.

* * *

We are grateful to Convair friends for the beautiful flowers and expressions of sympathy at the loss of our husband and brother, John C. Estill.

Maxine W. Estill
Charles D. Estill, Dept. 3-1.

* * *

My heartfelt thanks to my Convair friends for the beautiful floral tributes, cards of sympathy, and personal messages at the loss of my husband, William J. Morrow.

Beulah E. Morrow, Dept. 188-8.

* * *

HOLLOMAN AFB

I wish to acknowledge with deepest gratitude the kindness and sympathy accorded me and my family during our recent bereavement.

Angelo Maracchini and family
Dept. 313-6.

Births

SAN DIEGO

DIAZ—Son, Mario Antonio, 6 lbs., 12 oz., born April 3 to Mr. and Mrs. R. M. Diaz, GD/E Dept. 5.

HAWN—Daughter, Leslie Sue, 7 lbs., 4 oz., born April 7 to Mr. and Mrs. H. J. Hawn, Dept. 171.

McHENRY—Daughter, Lori Jean, 7 lbs., 4½ oz., born Feb. 28 to Mr. and Mrs. R. L. McHenry, Dept. 160.

SULLIVAN—Son, William Joseph Jr., 7 lbs., 12 oz., born April 16 to Mr. and Mrs. W. J. Sullivan, Dept. 180.

WALKER—Daughter, Leslie Anne, 7 lbs., 13½ oz., born April 13 to Mr. and Mrs. Arthur C. Walker, Dept. 190-5.

Deaths

SAN DIEGO

AVERY—Beulah M., Dept. 6. Died April 13. Survived by sister, Gladys L. Decker.

ESTILL—John C., Dept. 6. Died April 9. Survived by wife, Maxine; two sons, George and David; two brothers, Charles and James Estill.

Mfg. Research Area Improved

Office area of applied manufacturing research (Dept. 190) at Convair San Diego is in the midst of a "face-lifting" job with completion due the middle of next month.

Over 50 people of the department under R. M. Hatcher, manager, have been moved into Bldg. 8 and Bldg. 33 during the five weeks the renovation work is under way.

A drop ceiling of coated fiber glass panels is being installed to make an 11-ft. room height. Lighting fixtures will be lowered below the new ceiling. Complete air conditioning will be put in and the whole area repainted a beige color. Plant engineering is in charge of the work.

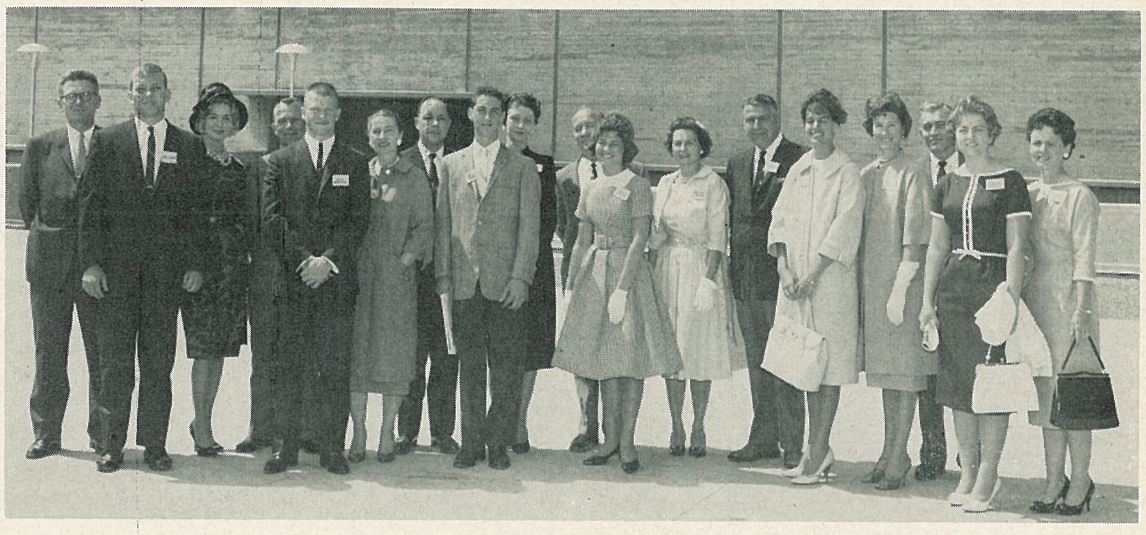
CONVAIR SD PAIR WIN TRIP TO NYC

A lucky Convair San Diego couple will be enjoying an expense-paid vacation trip to New York City this summer, courtesy KOGO radio station, San Diego.

Vi and Walter Gagne, both in shipping at Rose Canyon site, had the thrill of seeing their entries in a musical program drawing contest drawn out of the hat over Channel 10 this month.

By submitting their five favorite song titles to "The Sound of Brilliance," heard daily over KOGO, they hit the jackpot—two round-trip airline tickets to New York, a three-day stay at Hotel Roosevelt, and tickets to six Broadway shows.

Since New York is Gagne's home state, they plan to extend their stay to visit relatives during their vacation. It will be his first trip back since he joined Convair SD over six years ago and the first time Mrs. Gagne has been there in 20 years.



HAPPY DAY—Winners of 1961 Convair SD Management Club scholarships and parents line up before last Wednesday luncheon commemorating final selection. Top boy is Carl Cheney (second from left); top girl, Carole Urbanac, in center of group (wearing checked dress).

Top Scholars Win $1,000

Carole Urbanac and Carl Cheney won 1961 Convair San Diego Management Club scholarships after a tight race that taxed judges in making a decision between six high-caliber students.

Carole, daughter of Carl M. Urbanac of Dept. 6, and Carl, son of Harold K. Cheney (Dept. 6-40), each will receive $1,000 for their college educations.

The four runners-up will each get a $100 U. S. Savings Bond. They are Gwendolyn Nowry, daughter of S. E. Nowry of Dept. 6; Evelyn Rockar, daughter of Tibor Rockar, Dept. 190; William Truex, son of A. C. Truex, Dept. 6; and David Anderson, son of T. A. Anderson, Dept. 192.

Final decision was made last Wednesday following personal interviews and consultation by the three outside judges, J. C. Kerns, supervisor of professional recruitment at Ryan Aeronautical Co.; Dr. Robert Penn of San Diego State College psychology department; and Margaret Olson, dean of students, SD City College. They were assisted by the club's scholarship committee chairmanned by Keith Blair.

Carole, 18, is a senior at Mount Miguel High School. Besides standing near the top of her class scholastically, she has been active in a wide range of school groups — Y-Teens, Girls' Glee Club, Girls' Ensemble, language clubs, church youth group. Most of her interests center around creative writing and dramatics. She was judged first in a girls' impromptu speech competition and her sewing entry won a 4-H contest. Her plans include an English major and speech minor for teaching.

Carl Cheney, 17, graduates this year from Grossmont High. He is among the top five students in his senior class of 500, carrying a number of honors classes. He has a long list of outside interests, running the whole range from student administration, athletics, to music, dramatics, and creative writing. He won his varsity letter in football, was on the track team, treasurer of Key Club, secretary-treasurer of Boys' Federation, Senior Senator, Student Council Representative, to mention a few.

Serving on the club scholarship committee with Blair were H. E. Mayer, R. H. Nall, Ray Lange, Ted Houk, E. H. Amory, Glen Munkelt, Clair Taylor, Barbara Vincent, and J. W. Woodhouse.

POWAY TRAIL RIDE SLATED ON SUNDAY

An all-day trail ride this Sunday (April 30) will take Convair SD Riding Club members through the back country.

They will meet at 10 a.m. at the Terria Ranch at the junction of Highway 67 and Poway Road. The chuck wagon will meet the riders at 1 p.m. to serve luncheon. Everyone intending to join the outing is asked to call for food reservations through Luke Barbour, Plant 1, ext. 2546, or HO-6-6536.

Twenty horses are available for rent at $7 each for the entire day.

Eight Convair Students Win Dynamics Merit Scholarships

(Continued from Page 1)

family's financial circumstances and costs of schools selected.

Paul Langlois, 17, will graduate this year from St. Augustine High School in San Diego where he has been active as a member of the school newspaper and yearbook staffs, Pep Club, Chess and Bowling Clubs. Other outside activities included Boy Scouts and Explorers, and the Catholic Youth Organization. He plans to prepare himself for a high school teaching career at Seattle University, Wash.

Clifford Meland, 18, is a senior at Helix High School, La Mesa. He will enroll in San Diego State College this fall for a major in physics pointed toward the research field. He was selected by the National Science Foundation program to serve as a laboratory assistant at Scripps Institution of Oceanography last summer. He has been vice president and secretary-treasurer of the high school Radio Club, and president and treasurer of his church youth group.

Two General Dynamics scholarships went to sons of General Dynamics/Electronics families, Rochester, N. Y., and two to Electric Boat sons.

Roy Dill, Paul Hamm Throw Hats in Ring For Prexy Post of SD Management Club

Presidential candidates Roy W. Dill (Dept. 5) and Paul A. Hamm (Dept. 190) head the slate of nominees announced for the 1961-62 term of Convair San Diego Management Club.

Chairman of the nominating committee, B. J. Wood, revealed a slate of 29 candidates for six club offices and board of control posts at the April 22 meeting held at Caliente.

As in the past, nominations were also accepted from the floor.

A close contest is expected to develop in the presidential race, with both candidates well known in Management Club circles.

Dill, who is in long-range planning department, has been a club member since 1952 and is presently finishing a one-year term as first vice president. In addition to filling a number of committee assignments through the years, he has served as both club financial secretary and treasurer.

Hamm is perhaps best known for his work with the local area council where, in the past four years, he has filled positions of director, president and past president. A club member since 1952, Hamm also served as financial secretary and treasurer between 1957 and 1959.

According to Wood, some 2,000 club members will receive ballots about May 10 and will be asked to mark them and return them in the plant mail before the deadline of May 19.

Results of the vote will be revealed at the May Management Club meeting and formal installation will take place at the June meeting.

Following are candidates for club offices and board of control posts:

1st vice president—E. R. Fink (Dept. 25), R. H. Lange (Dept. 4).

2nd vice president—C. L. Ambler (Dept. 3), C. W. Clark (Dept. 140).

Recording secretary—W. M. Holland (Dept. 116), E. V. Laird (Dept. 190).

Treasurer—G. R. Bailey (Dept. 197), R. M. Montgomery (Dept. 21).

Financial secretary—R. G. Macomber (Dept. 91), W. J. Wood (Dept. 6).

One-year-board (four to be elected)—R. C. Beezley (Dept. 123), J. Freeman (Dept. 4), J. A. Gliebe (Dept. 249), A. P. Langlois (Dept. 190), H. Lund (Dept. 190), R. B. Mohr (Dept. 249), L. R. Nieder (Dept. 15), J. B. Skibinski (Dept. 6), A. M. Van Horne (Dept. 400).

Two-year-board (two to be elected)—W. M. Basile (Dept. 160), C. H. Hahn (Dept. 8), M. B. Fuhrmann (Dept. 180), C. W. Maxfield (Dept. 120).

Three-year-board (two to be elected)—E. W. Manning (Dept. 25), A. B. Oberg (Dept. 31), J. N. Pasich (Dept. 401), B. H. White (Dept. 6).

Cost Reduction Speedup Needed

(Continued from Page 1)

Far and away the leader among indirect departments at the end of March was Dept. 3, industrial relations, which was almost to 70 per cent of its total goal of $25,000. Also ahead of its savings schedule was Dept. 44, material control, which has saved some 30 per cent of its $30,000 total.

Two sizeable Cost Improvement Proposals were submitted during the month of March.

C. E. Rice (Dept. 137) is credited with savings of $14,268 for his proposal to combine certain assemblies and details into one sub-assembly.

Savings for a CIP submitted by D. R. Wilson (Dept. 129) are set at $22,933. He suggested using cloth instead of plastic bags to manufacture trim panels.

More Teams Needed For Shop Softball

More teams are presently needed to fill out CRA's shop league softball program at Convair SD.

Rules have been revised so that two smaller departments may field one team or a sponsoring department may have as many as four players from other departments. All participants, however, must be Convair employees or dependents.

Teams wishing to enter shop league activity should contact either Tony Berardini, ext. 2910; or Pete Beyrer, ext. 1245, both Plant 1.

A final meeting for managers will be held May 11 at 5 p.m. in the CRA Clubhouse on Pacific Hwy. League play will probably start the week of May 15.

★ Convairiety ★

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SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Fred Bettinger, news editor; Grayce Fath, Helen Pemberton.

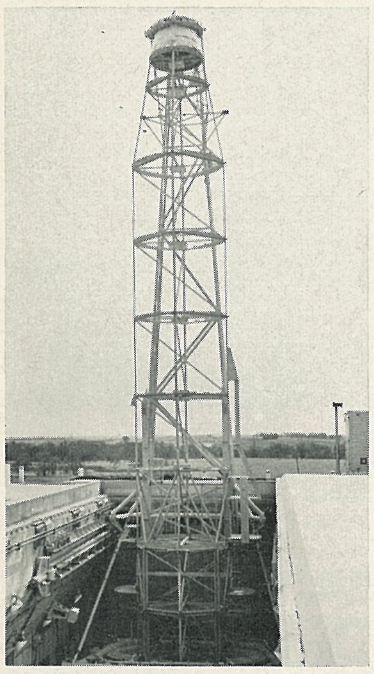
Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.

'Whalebone, Iron Atlas' Assist in Missile Site Check Out



"SKELETON" — Nicknamed "whalebone," this is dummy Atlas missile used to check out fittings, etc., at launch sites. It is shown above in vertical position at a Forbes AFB site.

Two unique missile validation tools, one "old-timer" and a relative newcomer, are earning their keep as missile "simulators" in development of launching facilities for the Atlas missile.

Most familiar of the two is a device called a "whalebone," that dates back to the early days of the Atlas program. Just beginning to be seen at test and operational bases for the Atlas is an evolution of the early model, called simply an "Iron Atlas."

Both are used by Convair Astronautics technicians in validating engineering areas on Atlas launch towers, gantries, horizontal and silo launchers.

In short, they take the placc of an Atlas missile for this work.

The whalebone is actually a skeleton of three-inch square tubing to which quarter-inch plywood templates are attached to form, in exact dimensions, the outline of the Atlas. The Iron Atlas is essentially the same thing, although fabricated entirely of rolled steel in the exact shape of the Atlas.

Initially, the whalebone was intended merely as a device for checking clearances in launch facilities. Later it was equipped with facilities for checking mechanisms and attach point. Still later it was used for weight and center of gravity studies for erectors, and finally to check out silo elevators.

The whalebone proved effective for all except the silo checks. It was and is being used extensively at Atlas bases to be equipped with series "D" and "E" missiles. However, the use of lead weights on the whalebone frame left something to be desired in checking elevators.

For this reason the Iron Atlas was developed. It consists of four individual sections which can be bolted together and sealed with O-rings at joints. Water is then pumped into the hollow interior to duplicate exact missile weights (loaded) as well as centers of gravity.

Because the whalebone consisted of a single unit, special missile trailers used for transporting the Atlas were needed. The Iron Atlas can be disassembled and shipped on a low flat bed trailer equipped with special chocks to hold the sections in place.

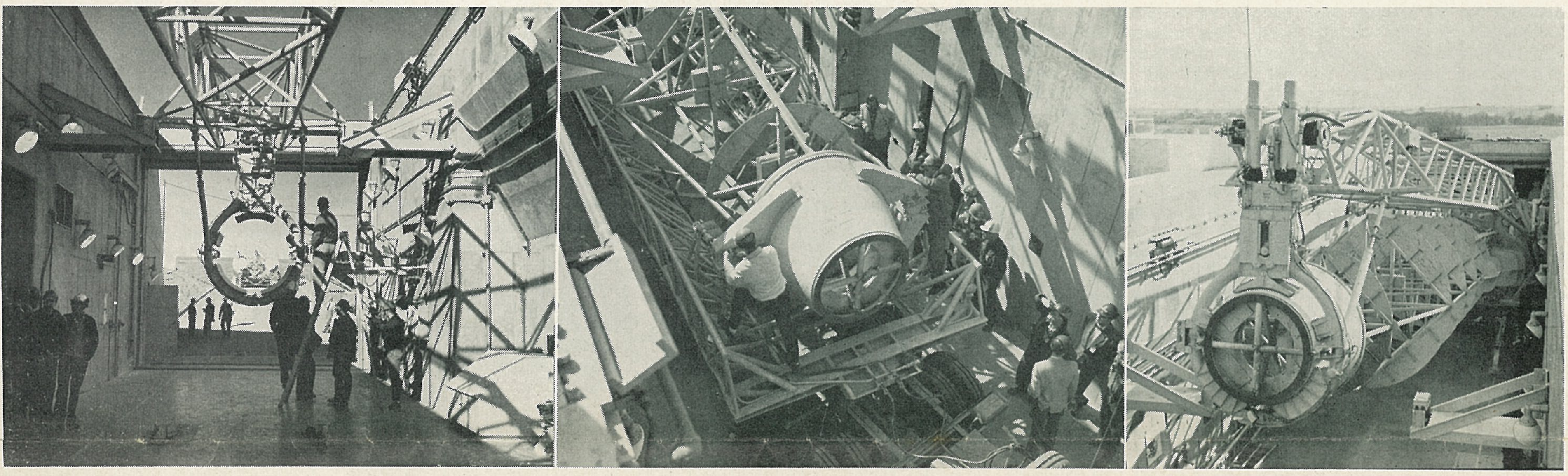
Five whalebones were built, then shipped to Atlas bases as needed. One of the earlier units was fabricated for Astro by Convair San Diego. Others were built by Astro's jigs and fixtures (Dept. 451), the department also responsible for building Iron Atlases.

Before the Iron Atlas is shipped it is assembled and erected in Astro's hydrostatic test tower. With the cooperation of Astro's fire department water is pumped from the Bldg. 2 reflection pool into the missile for checks, then back into the pool where it again becomes backup for Astro's fire protection.

Key development figures on both programs were George Vollmer, Jack Keorner, John Carr and F. B. Wahl, working in tool design (Dept. 402) under R. R. Sodomka, supervisor. Fabrication efforts were directed by R. L. Richardson, J. J. Quarles and R. Richards.



INTENT—During "whalebone" erection at Forbes AFB site control center are John Hammett, operator, D. B. Rogers, Charles Varns, D. E. Hoegh.



BACKING IN—Brought in by trailer, "whalebone" that doubles as Atlas missile is positioned at launch site near Forbes AFB. In center crews remove trailer clamps prior to installation. At right trailer has been removed and missile erector is slowly moving "whalebone" toward erect position.

880-Ms Slated For Swissair

Convair will deliver two Convair 880-M jet airliners to Swissair late this summer.

Both aircraft will serve all Far Eastern points of the Swissair network and thus permit the airline to start jet operations to these destinations at approximately the time planned originally for the Convair 990 Coronado.

The bigger and faster 990 Coronados will be put into service by Swissair and Scandinavian Airlines System at the beginning of 1962.

Delay of 990 Coronado deliveries resulted from a decision to incorporate improvements made on the basis of experience gained in the first stage of the test program.

FAA Will Train Pilots In 12-Seat 880-M Jet

There is one Convair 880-M jet transport that will never carry a paying passenger. It will, in fact, have only 12 seats.

Its primary purpose will be to train air carrier operation specialists for Federal Aviation Agency.

Delivery to FAA of a Convair 880-M jet transport is scheduled this fall and will boost the FAA jet fleet to three (including a Boeing 727 and Lockheed Turboprop Electra).

The airplane will be headquartered at Oklahoma City, Okla., home of the FAA school where pilots are trained as specialists on different types of commercial craft.

For instance, 880-M specialists will log a minimum of 50 hours each year as pilot-in-command of the airplane. The FAA specialists are then assigned to flag carriers of the United States operating the Convair craft.

Laying the groundwork for acceptance of their airplane 12 FAA representatives were at Convair San Diego this month for an intensive 40-hour planners program.

The FAA men in attendance represented four segments of the FAA operation: School Training Program and Facilities and Material Depot, both in Oklahoma City; Bureau of Facilities and Bureau of Flight Standards, both Washington D. C.

Another contingent of FAA personnel will arrive at Convair San Diego June 19 and stay through Aug. 5, taking part in a comprehensive training program which will cover 880-M systems, electrical and electronics installations, and power plant.

On hand this month to assist in the planners program for the FAA group were C. H. Williams, senior field service representative; W. M. Anthony, field service rep.; and instructors Jim Eschwege, R. F. Nixon, Paul Philp, W. W. Kinney and J. D. Kennedy.

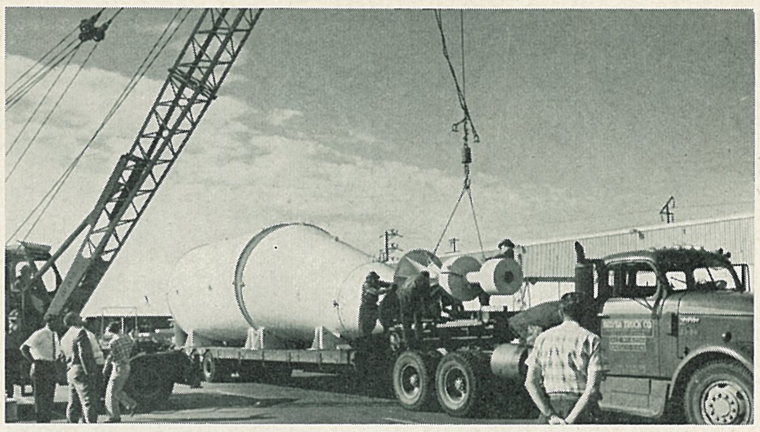


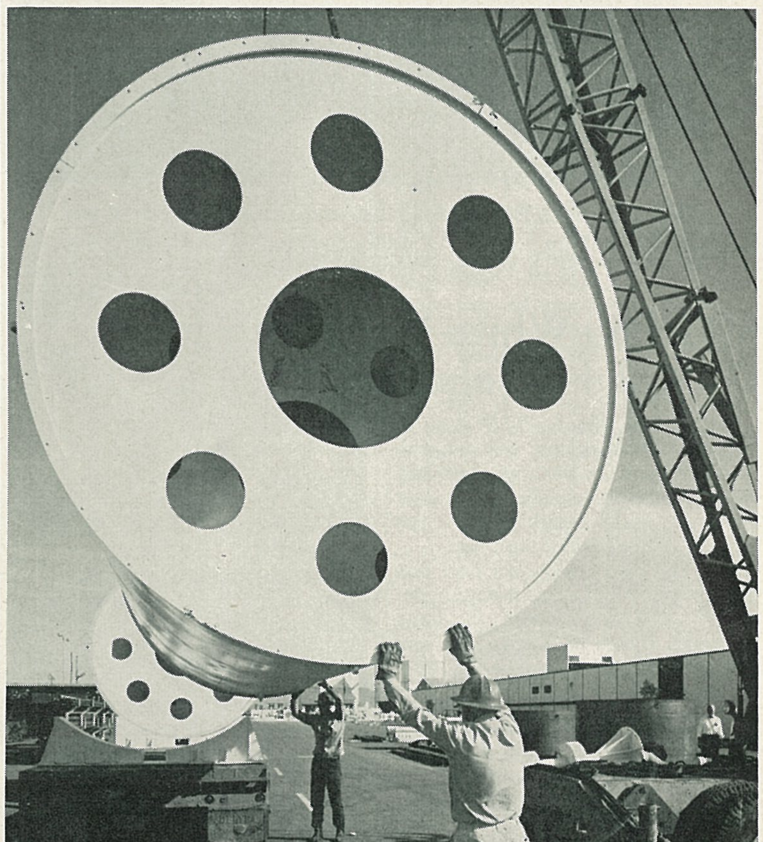
PLANNERS—Even dozen of Federal Aviation Agency representatives spent April 10 through 14 at Convair SD for 880-M planners program. From left (on stairs) are D. L. Latham, D. A. Brown, Robert Sypheard, Frank Thomas, Charles Pfrommer, Art Holmberg, Ralph White. From left (on platform) are Hal Mannick, Russ Russell, W. W. Smith, R. H. Williams, J. F. Kempf, U. J. Makela (Convair instructor).

Con-Trib Donations Of $6,000 Approved

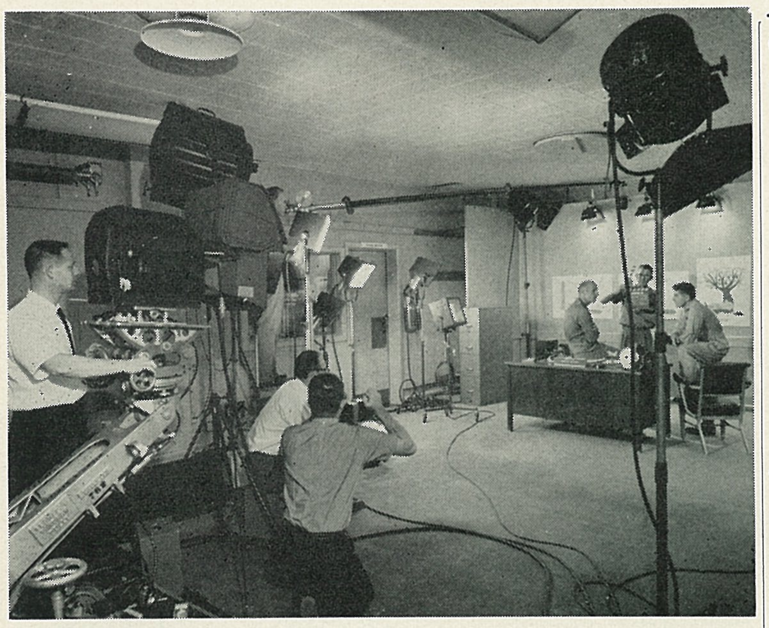
Two donations totaling $6,000 were voted for San Diego organizations at the last meeting of Convair SD Employees' Con-Trib-Club Committee.

Muscular Dystrophy Associations of America, Inc., will receive $1,000 and the San Diego County Branch of American Cancer Society, $5,000.





"IRON ATLAS"—More recently developed as Atlas simulator is this variety which comes in four sections. Joints are sealed and dummy missile can be filled with water to reproduce weight of real Atlas.



ACTION!—On set during production of F-106 film are (left to right) Chuck Myers, F-106 chief test pilot; Joe O'Connell, Convair SD cameraman; and Capt. Dave Tilton of AF, playing part of student pilot. SD movie crew includes Fred Miller on camera, Lynn Jaquish on mike, Walt Jenevein directing, and Don Rea (in front of camera) assisting action.

Training Movie Produced For AF Deals With 'Sink' Techniques

A new training motion picture, compiled by the Convair San Diego motion picture section and starring the F-106 jet interceptor, was due for release by the Air Force the middle of this month.

The film, entitled "Century Series Rate of Sink," was made for USAF Headquarters, Deputy Inspector General, Flight Safety, after the AF had approved a proposal originally conceived and submitted by SD motion picture section. Final approval of the finished product was received early this month.

Plot deals with approach and landing techniques necessary to insure proper rate of sink in the landing of high speed Century series aircraft, which includes Convair's F-102 and F-106. Chuck Myers, Convair F-106 chief test pilot, and Capt. Dave Tilton, F-106 chief acceptance pilot for the AF at Palmdale, play lead roles in the comparison of outmoded prop planes and modern jet interceptors.

The training film is scheduled for distribution to Air Force, Navy and FAA installations throughout the world with present plans calling for release of nearly 300 prints.

The script was written by Fenton Calhoun; directed and edited by Walt Jenevein. Photographers were Fred Miller, Darold Berry, Bill Carter, Joe O'Connell, and Don Rae, and sound was handled by Bob Reynolds and Lynn Jaquish. Entire movie crew is assigned to Convair SD motion picture section supervised by Warren Kemmer.

Technical assistance for production was provided by Air Force Command Representatives, Lt. Col. John Landry of Norton AFB and Howard Southgate, air photographic and charting service project officer from Orlando AFB, Fla.

Convair Son's Frog Leaps to Victory

"Taco," high-jumping frog of John A. Vollmecke, 9-year-old son of A. R. Vollmecke (SD-Dept. 68-0), came in third at the recent annual Southern California Regional Frog Jumping Contest at Del Mar to win a trophy for its young owner.

Retrieved from the bushes when it escaped during qualification trials, with most of the spectators joining in the hunt, "Taco" was prodded by John to a jump of 8 ft., 3½ in. Winner jumped 11 feet.

SD Man Director Of Musical Review "Going, Going, Gone"

Convair folk will figure prominently in the musical review, "Going, Going, Gone," to be presented by the Rhythm-Aire Players at 8 p.m., May 19-20 at Pacific Beach Women's Club, 1761 Hornblend.

The show, directed by Robert Brisbin, Convair SD Dept. 192-0, will feature tunes of the Gay 90s, Roaring 20s, and current Broadway hits.

Included in the cast are Brisbin, Victoria Eberly, SD Dept. 34-1, and Astro employees Ed Moores, Dept. 833-5; Joe Kraynak, Dept. 833-1, and Stan Medford, Dept. 250-2.

The group's previous local appearances include a meeting of the Convair Astronautics Management Club. Tickets at $1.25 per person, or additional information are available from Medford, Astro ext. 1010.

Value Engineering Article Appears

"How is your hindsight?" an article outlining the progress of value engineering at Convair and other General Dynamics divisions, appears in the April 1961 issue of "The Southwestern Purchaser."

The article was written by C. W. Doyle, value coordinator in FW spares department. Doyle has appeared before numerous value control seminars and meetings across the country during the past few months.



PLAY BALL!—G. S. Dean, foreground, and B. R. Main mark off distance from home plate to first base as FW Management Club started latest project—building softball diamond for Lena Pope Home for Children.

Convair Clubmen at FW Building Kids Diamond

It'll be "play ball" at Lena Pope Home this summer, thanks to Convair FW Management Club.

Club members are erecting a regulation-size softball diamond for the youngsters.

Joe Starks, local contractor who contributed his time and machinery to the club's efforts, broke ground for the diamond April 12.

Club members, under direction of Committee Chairman G. S. Dean, followed up by leveling the area. And about 125 club members are now laying out the diamond, chalking the ground lines, and taking care of other details which should have the diamond ready for play by month's end.

The project also will include erection of about 170 feet of wire fence behind home plate and along either foul line. The fence ranges from 20 feet high behind home plate to six-feet high along the foul lines beyond first and and third base.

"We're looking at this as a long-range project," Dean said.

"Next year we might add bleachers. After that, it might be tennis courts."

Other committee chairmen involved: B. R. Main, Dept. 20; Bert Barber, Dept. 89-2; A. K. Lawley, Dept. 89; and J. W. Harpstrite, Dept. 22-2.

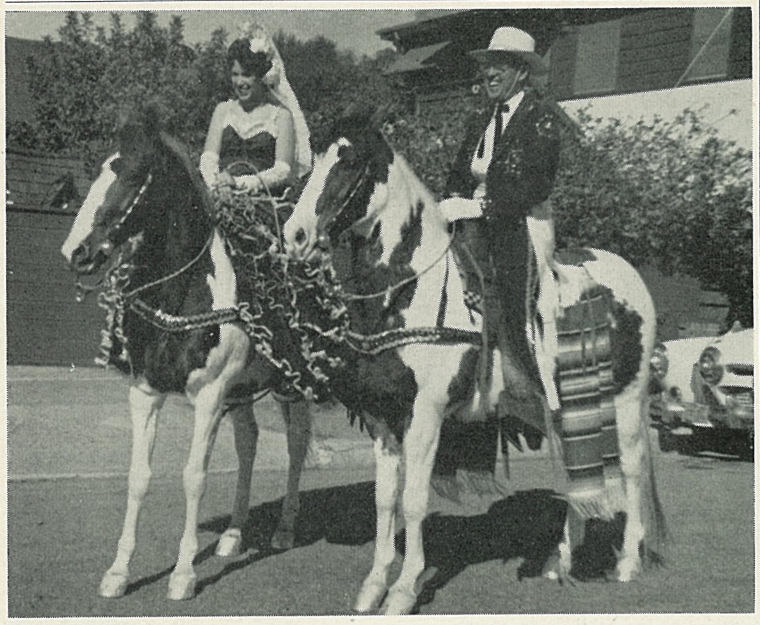
880s to Serve Jacksonville

New Convair 880 jet service to Jacksonville, Fla.—in fact the first commercial jet flights in that area—will be started April 30 by Northeast Airlines.

Non-stop flights will link Jacksonville with New York on a daily basis and, to the south, pure-jet 880s will fly between Miami, Tampa and Jacksonville, according to an announcement by James W. Austin, president of Northeast Airlines.

The New York to Jacksonville run will take two hours, by far the fastest service ever offered between the two points. Northbound flights will leave Jacksonville at 4:30 p.m. daily; return flights will leave New York at 4:45 p.m. daily.

Northeast Airlines began 880 jet service on Dec. 15, now offers 2,600 jet seats daily between its East Coast and Florida "jet cities." Northeast is presently flying six of the Convair jets.



TWO TO BE THREE—Cynthia, 16, and father, Bruce White (SD-Dept. 119), will be joined by mother, Lou (SD-Dept. 400) for first time in family act at Pomona parade next month.

SD's Lou White Will Join Family On Cal. Horseback Parade Circuit

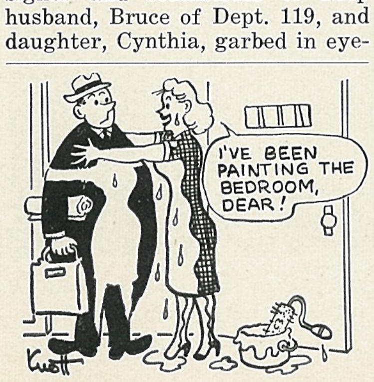
Lou White, Dept. 400-7 at Convair SD, will come out of the sewing room to don one of her own creations as she joins her husband and daughter on the parade circuit this summer.

For the last six years Lou has plyed her talents as costume designer and seamstress to keep husband, Bruce of Dept. 119, and daughter, Cynthia, garbed in eye-catching Spanish costumes for their horseback appearances.

This year she was persuaded to make herself one of the elaborate ruffled dresses to match and turn the act into a family trio. She'll make her debut at La Fiesta del Valley de Pomona in downtown Pomona, Calif., May 6.

Since Cynthia was a small tot of 10, she and her father have been in demand for festivals and parades. The Whites even gave up their home in San Diego to move near Santee where they could keep their horses — all "paint" ponies.

Lou works nights and weekends to make the decorative costumes (Bruce's jackets glitter with 18 gross of rhinestones). They've lost count of the trophies—over 100 apiece—they have won for the costumes.



San Diego Design

Mechanical 'Heart' Circulates Blood During Operation on Convair Girl, 9

Nine-year-old Talia Morris shifted a bit in her bed at Children's Hospital in San Diego as she deciphered instructions on a magic kit her father had just given her.

Her heart was pounding nicely.

She put down the magic kit, and went back to her rock mosaic picture. She showed it to two small patients in wheel chairs at the foot of her bed.

Her heart continued to beat nicely.

The point is, that in a sense, Talia Morris owes her heart to the skill of surgeons and a Convair-designed, heart-lung machine that took over for her own heart during a four-hour operation April 5.

Talia (daughter of Convair Astro's Oscar Morris, Dept. 321) was the 73rd patient on whom the heart-lung machine has been used.

Surgeon for the operation at Sharp Hospital, San Diego, was Dr. G. A. Gibbons. He was assisted by Drs. John S. Chambers and H. C. Hewitt.

Prior to 1958, not much could have been done for Talia. The heart-lung machine, designed by engineers at Convair San Diego, is credited with making major heart surgery possible in Southern California at that time.

Talia's heart trouble was detected when she was an infant, but until machines such as the Convair model became available the operation was not possible, according to her father.

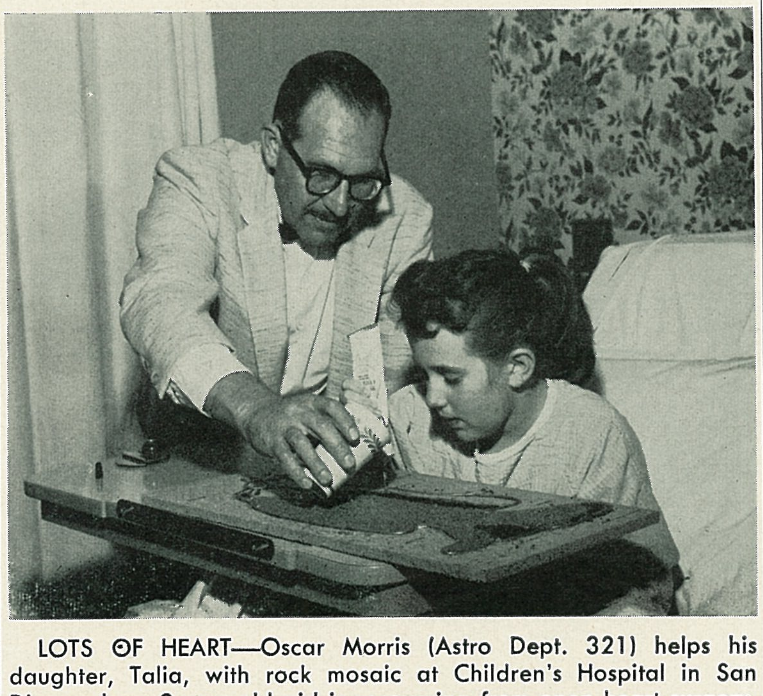
"Talia has led a fairly normal life, although she has had to be careful about overexertion. She has done a terrific amount of reading and is willing to tackle almost any work," said Morris.

As far as could be predicted last week, Talia's operation was a success. Her release is anticipated next week and she will be able to join her fourth grade classmates before the present semester is over.

Hopes are high that a new mechanical heart pump, incorporating a number of design improvements, will soon replace the prototype that has been in use at Sharp Hospital.

Design improvements are the work of some 11 engineers at Convair San Diego who have donated thousands of spare-time manhours to the task.

The improved machine was made by Hewitt and Faust Mfg. Co., of El Cajon and Convair SD Con-Trib-Club approved a $7,000 expenditure to cover cost. The new machine is now in the process of receiving final adjustments. It is expected to have added safety features, be simpler to assemble, faster to set up, mechanically more reliable and move blood even more gently.



LOTS OF HEART—Oscar Morris (Astro Dept. 321) helps his daughter, Talia, with rock mosaic at Children's Hospital in San Diego where 9-year-old girl is recovering from open heart surgery. Talia was 73rd person on whom Convair-designed heart lung machine was used during surgery.

NEWS FROM OTHER DIVISIONS OF GENERAL DYNAMICS CORP.

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of six divisions and a Canadian subsidiary, Canadair Limited, of Montreal, airframe builders. The divisions are:

Convair, head offices at San Diego, Calif., aircraft, missiles and space systems.

Electric Boat of Groton, Conn., submarines.

General Dynamics/Electronics of Rochester N. Y., Los Angeles and San Diego, Calif., telecommunications, electronic equipment.

Liquid Carbonic of Chicago, Ill., carbon dioxide producer, industrial and medical gases.

General Atomic of San Diego, Calif., nuclear research, development, production.

Electro Dynamic of Bayonne, N. J., electric motors, generators.

ELECTRONICS WINS AF COMMAND POST RADIO ASSIGNMENT

General Dynamics/Electronics, Rochester, N. Y., has received a $497,050 Air Force contract for radio equipment, it was announced by Col. Robert V. Kirkland, director of procurement and production, Rome Air Materiel Area.

The contract is for engineering, manufacturing and installing ultra-high frequency and single side band radio communications equipment for command and control functions of the Air Force missile programs.

★ ★ ★

The Canadair Forty Four certification program is in the final stages of demonstration to the Canadian certifying agency and the company estimate that the type certificate will be issued early in June. The aircraft has been designed and all test programs conducted in accordance with U.S. Civil Air Regulations for turbine-powered transports.

★ ★ ★

A General Atomic TRIGA Mark-F reactor will be purchased by the government of Indonesia for the Institute of Atomic Energy at Bandung, Java. General Atomic has also announced that TRIGA reactors are now available with a new higher energy output of 250 thermal kilowatts, giving added scope to the use of nuclear energy in many fields of scientific research.

★ ★ ★

Construction has commenced at Electric Boat on the nuclear-powered submarine Flasher, an attack submarine designed primarily for anti-submarine warfare. Electric Boat also holds a contract for the construction of two sister ships, the Greenling and the Gato.

★ ★ ★

A Convair 880 jet, flying as Trans World Airlines Flight 134, has established a new unofficial speed record of two hours, 57 minutes from San Francisco to Chicago. The former unofficial record of three hours, five minutes, was also set by a TWA Convair 880 on the same flight, covering 1,920 miles.

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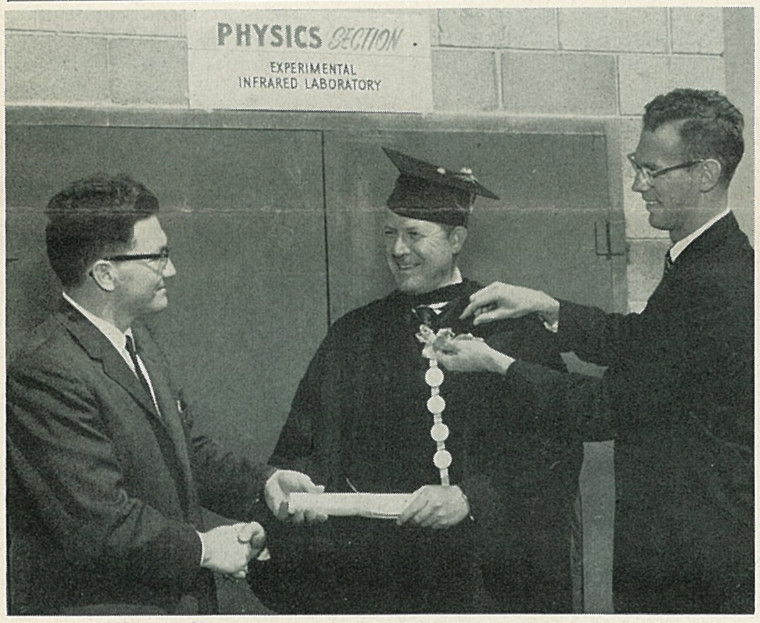
Frank Pace Jr. has accepted the chairmanship of a "Salute to Omar N. Bradley" dinner in New York, May 30. President Kennedy will address the dinner which is sponsored by the Eleanor Roosevelt Cancer Foundation.

★ ★ ★

Six graduate students from Texas colleges and universities have won summer research fellowships at General Atomic John Jay Hopkins Laboratory. They will work with scientists seeking to harness nuclear power for peaceful purposes under a program jointly sponsored by General Atomic and the Texas Atomic Energy Research Foundation.



FAMILIAR SURROUNDINGS—Former Secretary of Army, Frank Pace Jr. (left), talks with present Secretary, Elvis J. Stahr Jr., at desk he once occupied in Pentagon. Now chairman of General Dynamics, Pace was Army Secretary during Korean War years.—U. S. Army photo.



"RARE" DEGREE—Emmett Fowler of SD engineering facilities (center) receives "honorary Ph.D. degree" in "facilitus planus" from Dr. A. E. S. Green, SD physics chief, and ribbon of silver dollars from Dr. F. C. Harshbarger for his part in rushing construction of new physics research facility. Mock awards enlivened dedication of building at SD ramp.

Physics Research at Convair SD Moves Into New Lab Facilities

A new building for physics research at Convair San Diego has been erected in record time at the San Diego seaplane ramp.

The experimental infrared laboratory, designed for launch phase radiation studies, was completed in 28 working days by Callahan Bros., San Diego contractors. Plant engineering provided specifications and supervision.

The 24x30-ft. concrete block building replaces a small portable structure which had proved inadequate for the expanding research program. The new facility is but one phase in the enlargement of the physics section's ballistics defense research studies which have been under way the last couple of years, explained Dr. A. E. S. Green, chief of SD physics.

Under direction of Dr. F. C. Harshbarger, physics staff scientist, the experimental infrared research group is now engaged in two research programs for the Air Force Cambridge Research Laboratory under sponsorship of the Advanced Research Project Agency.

"Our work is concerned, primarily, with the study of light emitted from hot gases," said Dr. Harshbarger. "Small rocket engines are used to provide a source of the gases. The rockets are operated inside a tank where pressure can be varied to obtain a wide range of pressure conditions. Measurements are made with infrared monochromators making possible study of light emission as a function of wave length." At the new facility model rockets can be fired to simulate altitudes as high as 150,000 feet.

Information resulting from the experimental studies is available to Convair operating divisions for a wide range of applications.

The group, at present, consists of six people in the physics section with thermodynamic laboratory personnel responsible for design, construction, and operation of the altitude facility and rocket motors.

For his part in coordinating swift completion of the new building well before the April 1 deadline date, Emmett Fowler, engineering facilities supervisor, collected on a wager of five silver dollars and received a facetious "honorary degree" of Doctor of Philosophy in "facilitus planus" at a special ceremony.

Long-Range Strike

Earmarked for Strike on Tokyo, B-24s Diverted to Raid Shipping

(In this 58th installment of Convairiety's continuing history of Convair and its airplanes, B-24s engage in spectacular—and sometimes costly—raids on Axis territory.)

The 9th Air Force came into existence in the Middle East Nov. 12, 1942 (Maj. Gen. H. Brereton, transferred from India). Its nucleus was the "Halverson Detachment," a unit of 23 picked B-24Ds that had been organized in the States in the spring of 1942 to make a Doolittle-type raid on Tokyo from some base in China. Under command of Col. Harry A. Halverson, the outfit crossed the South Atlantic and Africa, but on reaching Egypt was detained for what was to be a single special mission, a long-range strike at the Romanian oil center at Ploesti.

This mission (not to be confused with the massive B-24 assault on Ploesti of August, 1943) was the first strike made by U.S. heavy bombers against a target within "Festung Europa." Thirteen Liberators took off singly from the RAF base at Fayid the night of June 11, and all but one reached Ploesti at dawn next morning. Bomb damage was scant, and some planes lost through internment when they landed in neutral countries, but the long-range strike was a token of massive attacks to come.

(See sidebar story below.)

Now Halverson's B-24s were thrown into the desperate effort to stem Rommel's advance on Egypt, initially with raids on Axis shipping in Bengasi and Tobruk harbors. Destined never to reach China, the Liberators and a handful of B-17s Brereton had brought from India were combined in July as the 1st Provisional Group. Reinforcements began arriving from home late in the month when B-24s of the 98th Group (Col. Hugo P. Rush) landed at Ramat David, Palestine. By early August the group's four squadrons were all in the Holy Land, based at Ramat David and St. Jean D'Acre.

In the three months that followed, Liberators pounded targets afloat and on both shores of the Mediterranean, as Montgomery advanced from the east and Eisenhower from the west to drive the enemy out of North Africa. By spring of 1943 most 9th AF Liberators (98th and 376th Groups) were operating from a complex of airfields in the Bengasi area of Cyrenaica and concentrating their strikes on Naples and Messina. B-24s opened the Sicilian pre-invasion air campaign July 2 with a 91-plane mission against airdromes in southern Italy, and later in the month teamed with B-17s of the 12th Air Force in crippling blows against railroad yards at Naples and Rome.

B-24s Faced 'Almost Unbearable' Ground Fire in Attack on Ploesti

In July of 1943, after participating in the opening of the Sicilian campaign, nine AF Liberators were withdrawn to train for one of the war's most remarkable air operations, a low-level attack on a complex of oil refineries in and near Ploesti, 40 miles north of Bucharest. Ploesti supplied an estimated fourth to a third of Germany's liquid fuel. Until after the invasion of Italy, it could be reached by no Anglo-American bomber except the B-24, flying from Africa.

Col. Jacob E. Smart of General Arnold's advisory council evolved the low-level attack. Eisenhower approved it, and Brereton directed the planning and training. To augment the 9th AF's two groups, the 44th and 93rd (B-24s), scheduled to move from the States to the United Kingdom were diverted to North Africa.

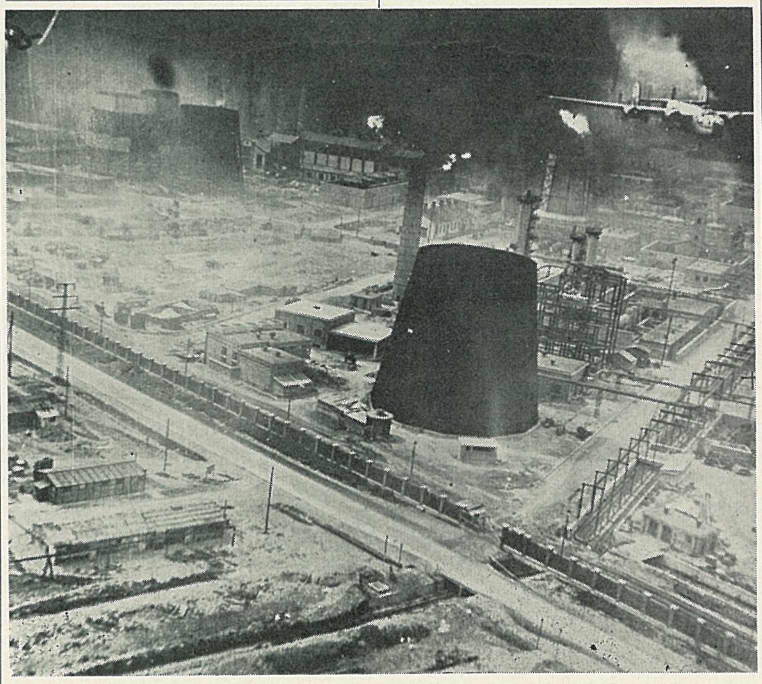
All five groups participated in the mid-July strikes at Naples and Rome, then entered a 10-day period of strenuous training near Bengasi. The crews practiced close-formation, minimum altitude flying; made repeated bombing attacks on a reproduction of the Ploesti targets, laid out on the desert; and underwent intensive briefing, and conducted two full-dress mock missions. For "Operation Tidalwave" B-24s were fitted with low-level bombsights and auxiliary bomb bay fuel cells, increasing gasoline capacity to 3,100 gallons.

Early in the morning of Aug. 1, 177 planes winged north over the Mediterranean past Corfu, then turned northeastward toward Albania, Yugoslavia and Bulgaria. Sixty-five miles from Ploesti, the planes dropped to 500 feet.

A miscalculation took the leading 376th Group off course to the outskirts of Bucharest, alerting Romanian defenses. Ground fire of almost unbearable intensity met this group and the following 93rd when they reached Ploesti and launched the attack. The 98th and 44th groups arrived next. "The Army Air Forces in World War II," Craven and Cate, gave this account:

"They found the defenses thoroughly alerted. Equally bad, they had to fly through fires and explosions of delayed action bombs left by the 93rd. The two groups would have been justified in turning back; instead, they drove straight against their targets through intense flak and explosions, flames and dense smoke which concealed balloon cables and towering chimneys. B-24s went down like tenpins, but the targets were hit hard and accurately. As the two groups left Ploesti, they were jumped by enemy fighters, and on the way home were attacked by every kind of plane from Me-109s to unidentified biplanes . . ."

Only the 389th Group, flying an individual mission against targets in nearby Campina, was able to carry through its attack according to advance planning, and with minimum loss. Its objective was completely destroyed. Altogether, the strikes wiped out an estimated 42 per cent of Ploesti's refining capacity, and eliminated 40 per cent of its cracking capacity for several months. The cost was high—54 bombers lost and of 1,726 men who had left Bengasi 532 were reported dead, missing, imprisoned or interned. For heroism, Ploesti has few equals in the annals of war, and five of the men who took part were awarded Medals of Honor.



FLAK AND FLAMES—Historic bombing of Ploesti oil center in World War II brought remarkable heroism, vast damage to targets, and many lost B-24s and crewmen.



SKI SESSION—Fine time was had by all April 15-16 weekend when host of Convair SD and Astro skiers journeyed to Mammoth Mt. At left youngster gets "feel" of rope tow in front of ski shelter and shops. In center photo, skiers take starting positions for Convair Open Race held April 16. At right, skiers pause for photo before tackling slopes. Novices took lessons over weekend, quickly demonstrating marked improvement. Trip was so successful clubs are planning two next year. At least 30 San Diego skiers made trip to take advantage of snow-covered slopes before end of skiing season.—Photos by Bob Weaver

Salvage Yards Open From 8 a.m. to Noon

Open hours for employee sales at Convair San Diego salvage yard have been changed to 8 a.m. until noon on the alternate Saturday sales days.

Change has been made to coincide with hours at the Astronautics salvage yard which is open to Convair people from both operating divisions every other week.

Coming dates for both salvage yards are: San Diego—April 29 and May 13; Astro—May 6 and 20.

Scholarship Dads Confuse Speakers At April Meeting

Convair Toastmasters proved poor guessers at their April 17 program, modeled on "I Have a Secret," television series.

They were confounded by the identity of their guests—six men who turned out to be fathers of Convair SD Management Club scholarship winners. Keith Blair (Dept. 6), moderator, had to introduce the group after the Toastmasters gave up.

Enjoying their "secret" were Carl Urbanac (Dept. 6), S. E. Nowry (Dept. 6), Tibor Rockar (Dept. 190), A. C. Truex (Dept. 6), T. A. Anderson (Dept. 192), and Harold K. Cheney (Dept. 6).

Next Monday night's dinner meeting (May 1) will be held at the Aztec Steak House in Pacific Beach at 6 p.m. For reservations call Blair, ext. 1543, SD Plant 1, or Ray Sodomka, Astro site, ext. 3496.

All other May meetings will be held in the executive dining room of the Convair cafeteria, Pacific Hwy.

GOLFERS TO VIE FOR CLUB TITLE

The Annual Convair Golf Club Championship will be played June 17-18, 24-25 at Flying Hills, with entries accepted today through May 26 at employee services outlets.

Entry fee of $1.25 per person will be used exclusively for prizes, with golfers paying their individual green fees.

Prospective entrants may register by calling employee services offices at Convair SD (ext. 1705), Astronautics (ext. 1111), or Plant 2 (ext. 1182).

SD State Sets Dates On Summer Session

Convair people in the San Diego area who intend to continue their formal education at San Diego State College may get catalogs for the coming summer sessions at the college. They will be available also at Convair educational services offices within the near future.

Sessions are slated for June 12-23; June 26-Aug. 4; Aug. 7-25 with some 175 courses in 29 fields offered.

Full information may be obtained from the Summer Sessions Office, SD State, JU-2-4411, ext. 471.

Convair Youngsters Win Top Awards At Greater San Diego Science Fair

Some 60 Convair SD and Astronautics youngsters participated in the Seventh Annual Greater San Diego Science Fair, held last week in Balboa Park's Federal Building.

The fair included 334 choice exhibits selected from hundreds prepared by junior and senior high school students in city and county schools.

Students worked independently on projects ranging from astronomy to digital computers, displaying the results of their studies in the form of exhibits and demonstrations at the fair. Here, they were judged by top scientists from local industries and institutions of higher learning.

Convair SD contestants winning first place awards were Dave Carrier, son of Mr. and Mrs. W. D. Carrier, Dept. 6; Anne Suydam, daughter of Mr. and Mrs. G. W. Suydam, Dept. 401-9; Virginia Gilmore, daughter of Mrs. Virginia B. Gilmore, Dept. 1-41, and Sylvia Lane, daughter of Mr. and Mrs. Leonard Andres, Dept. 146. Sylvia was sweepstakes winner in last year's fair, and attended the national event at Indianapolis, Ind.

Elisabeth Downing, daughter of Mr. and Mrs. Kenneth O. Downing, Astro Dept. 553-7, also won a first-place award, while Franz Jaggar, son of Mrs. Anne Jaggar, Astro Dept. 170-1, received an Air Force certificate in aerospace electronics and was winner of a special Chemical-Rubber award.

"We may rightfully take pride in the scientific progress which our young men and women have demonstrated in the preparation of this presentation," said J. R. Dempsey, Convair vice president and Astronautics manager, who served as chairman of the fair board. "The results assure us that our nation can maintain our scientific and industrial leadership for many years to come."

Convair figured prominently in organization and administration of the fair, as well as in the final judging. Ross Evans, Astro chief of educational services, and Emory Thurston served on the administrative committee for judging and awards; Ronald Nall, Convair SD training assistant supervisor, was in charge of scientific tours.

Among the judges were Dr. H. E. Adelson, J. W. Crooks, Dr. D. H. Garber, J. F. Haskins, Dr. J. M. Maughmer, L. E. Munson, E. W. Schwartz, and Dr. J. B. Sutton Jr., all of Astronautics; Dr. S. Kaye, Dr. W. J. Schart and Dr. C. P. Wiedow of Convair SD, and Dr. O. E. Myers of Convair scientific research.

All fair participants were presented with merit certificates, received personal career counseling from the fair's volunteer scientific staff, and toured San Diego scientific and industrial establishments including Convair SD.



SD SCIENTISTS—Above group of Convair SD sons and daughters were among some 60 Convair youngsters who participated in Greater San Diego Science Fair held in Balboa Park Federal Bldg. Six Convair youngsters won top prizes, others were awarded a number of second and third places.

BROADWAY BANGS DOUBLE VICTORY

B. L. Broadway (Dept. 115) had his turn at the double-winners' ring at the April 9 matches of Convair SD Pistol Club.

He shot a 297 to shut out the competition in the master class of the Police Course and a 298 to win the .22 Short National.

Runners-up in the master were Jim Halfacre (Dept. 180), second with a 291, and Carl Hornburg (Dept. 139), third, 290.

Ralph Picard (Dept. 7), scored 268 to take top spot in the expert class; Dale Young (Dept. 31), 280, first in sharpshooter; Dick Hargis (Dept. 31), 202, first, marksman.

"X's" broke ties to decide four places in the Short National. Trailing first-place winner Broadway, were Halfacre and Hornburg, both with 278s. Halfacre's four "X's" landed him second place. E. E. Bickar (Dept. 215) broke a 269-tie for fourth with Ash Bishop (Dept. 401-5).

SD-Astro Ice Skating Clubs Plan Trip to Anaheim Sunday

Ice skaters from both Convair San Diego and Astronautics will travel to the Anaheim area this Sunday (April 30) to try out one of Southern California's newest and most modern arenas.

They will converge on Glacier Falls ice skating arena just two blocks from Disneyland, about 9:30 a.m. Arrangements have been made through CRA for special group rates until noon.

Then, they can finish the day with an afternoon and evening at Disneyland, if they like.

All planning to go must pick up special identification tickets at either SD or Astro employee services for the discount rate. And, for reduced rates to Disneyland, they may pick up Magic Kingdom tickets at the same time.

Although transportation will be by private car, anyone without a ride can find a seat as the caravans form 7:30 a.m. at Astro and SD executive parking lots.

Directions to Glacier Falls, 211 W. Katella Ave., are by way of Santa Ana Freeway to Harbor Blvd. off-ramp, follow Harbor Blvd. past Disneyland to Katella Ave. (first stop light), left on Katella Ave. to the arena.

Further information can be obtained from CRA ice skating commissioners, Martha Woodberry, ext. 1245, SD Plant 1, or Bud Davies, ext. 3441, Astro site.

Membership Cards Needed by Riders

Convair SD Riding Club members are reminded that they must have current 1961 membership cards to qualify for CRA-sponsored riding discounts.

Only current membership cards will be honored effective May 1, said Marc Beresford, CRA commissioner.

Convair Team Opens Season On Saturday

The Convair-Astros start Western Softball Congress league play this Saturday (April 29) when they meet the Flying Hearts at Mayfair Park in Lakewood at 8:15 p.m.

The league schedule pits the Convair squad against the Escondido Dolphins at Helix Park May 3 and against Alhambra May 6, also at Helix. First home game at the Astro diamond will match them with Los Angeles May 13.

In the pre-season tourney concluded earlier this month, the Convair-Astros took their first two games, but dropped the third.

In the opener against Alhambra Bob Miller's pitching was backed up by doubles off bats of Mel Stilson, Frank Castro, and Dick Smith. Manny Gomes uncorked an inside-the-park homer to give the Convair team a 4-1 win.

In the second game Escondido was edged 4-3 on a circuit clout by Bill Doten and strong relief pitching by Art Bunge. The Convair nine dropped the third tilt to the Gardena Merchants 3-0 who went on to win tourney.

Club Keglers Complete Play

Two Convair SD Management Club keg leagues completed winter play last week and top teams and individual scorers collected trophies.

Close competition in the 750 league lasted right up until the last day, necessitating a roll off between the Final Five and Jets who tied for first place. The Jets won the trophy roll off, but Final Five garnered high team series, 2,554, and General Office collected high team game, 927. Individual honors went to E. Balcewicz with 263 for high game and Harvey Sass, 616, high series.

In the 825 league the ESD squad finished way out in front with a 22 game lead over second-place Pod and Pylon. ESD rolled high team series, 2,727; Pod and Pylon took high team game, 981. Top keglers were Tom Chadwick, high series, 643; R. Montgomery, high game, 256.

Receiving special awards at the trophy presentation were W. A. Nader, president of the 825 league, and V. A. Petricola, president of the 750 league.

Players Sounded Out On Summer Ball

First call for players interested in taking part in CRA summer baseball activities at Astro was issued this week by Commissioner Bud Mechum.

Initial workout is slated for 1 p.m. Sunday (April 30) at Gompers Junior High School, 47th and Hilltop, San Diego. Astro plans to field a team in the City Park and Recreation summer league opening around mid-June.

CRA Sports & Recreation Convairiety

Whitley Cards 126 Net Score To Win CRA Yater Memorial

W. H. "Bill" Whitley (Dept. 6) "found" his golf game that had been "lost" for five years to shoot a sparkling low net score of 126 and win the championship of Convair SD's top medal play tourney, the Yater Memorial.

Some five years ago Whitley was consistently in the 80s but during the past two years a 96 average was about the best he could card.

"I worked hard to get myself in top shape for the Yater," said Whitley. "I spent a number of hours practicing my putting and tried to groove my swing on the driving range."

After Whitley shot a low gross 89 the first weekend at Coronado he decided to "play it safe." This tactic paid off the next weekend at Flying Hills and Whitley posted an 83 which worked out to a combined low net of 126, some seven strokes ahead of his nearest opponent.

For his effort, Whitley will receive a $20 gift certificate and the Yater Memorial perpetual trophy will go on display in his department.

More than 30 other award winners have also been announced by Ken Wulfemeyer, CRA commissioner.

First low gross in the 0-13 handicap group went to Wayne Hines (Dept. 180) who stroked a 147. Low net leader was Ralph Way (Dept. 400) with 133. Tied for second low net with 136s were Ron Hinrichs (Dept. 14) and Logan Jenkins (Dept. 1-32). Saturday winners in the first handicap group were Bill Matluck (Dept. 15), first low net, 141; Doc Larman (Dept. 180), second low net, 142. Top Sunday shooters were Dick Hart (Dept. 192), 143; Gene Pollpeter (Dept. 31), 145.

In the 14-19 handicap bracket Joe Silva (Dept. 115) had low gross with 170. Low net winners were E. Smith (Dept. 25), 138; Ralph Montgomery (Dept. 21), 141; Sam Tomaiko (Dept. 31), 142. Low net leaders on Saturday were Wayne Turner (Dept. 3), 143; Bob North (Dept. 6), 144. Sunday honors went to Bob Lucia (Dept. 110), 148; Ed Kerfeld (Dept. 31), 151.

Handicappers from 20-24 were led by Sam Graves (Dept. 401) who carded a low gross of 179. Top low net score, 135, was posted by Curt James (Dept. 44). Tied for second low net were Pete Calta (Dept. 180) and Roy Sommers (Dept. 15), both with 139. A three-way tie developed for Saturday shooters among H. Byall (Dept. 34), Charles Keyes (Dept. 15) and John Serafin (Dept. 6), each of whom posted 141. Top low netters on Sunday were James Hammitt (Dept. 3) and John Pehota (Dept. 140), with scores of 140 and 146, respectively.

Low gross in the last handicap group went to Jack Santone (Dept. 400) with 196. Handicap leaders were Franklin Rogers (Dept. 115), 146; Alvin Johnson (Dept. 6), 147; and John Murphy (Dept. 190), 148. Low net leader on Saturday was Clinch Crocker (Dept. 91), 148; Bruce Shirk (Dept. 6) and Lee Woll (Dept. 3) tied for second low net with scores of 149. Low net honors on Sunday went to T. Hunley (Dept. 400), 150; and Ray Carothers (Dept. 400), 152.

Rockhounds Slate Weekend Jaunt To State Border

Rock hunting enthusiasts at Convair SD will be off to the desert this weekend (April 29-30) in their search for rare specimens.

Members and guests of the CRA Rockhound Club will gather Saturday morning about 9 a.m. at Gold Rock Ranch, near the Arizona border, to start combing the area. This particular location, about 180 miles east of San Diego, is rich in jaspagate, moss agate, petrified palm—both root and fiber—and blue dumortierite, said Dan Whorton, commissioner.

Signs will be posted at the Highway 80 turn-off on Ogilby Road, just east of the sand dunes on the way to Yuma. Gold Rock Ranch, a dry campsite, is 12 miles north. Campers are reminded to take their own water and firewood for the two-day outing.

Prices Discounted For Padres Games

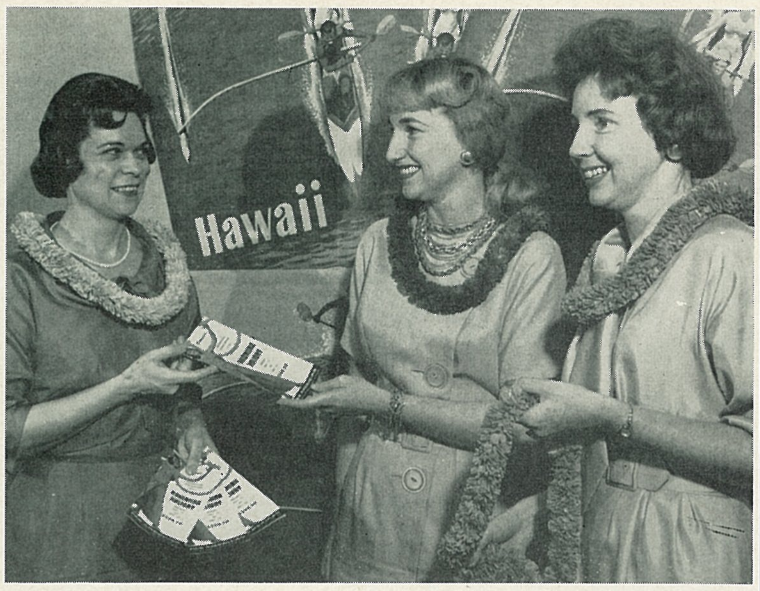
Baseball fans at Convair SD can get a 75-cent reduction in ticket prices at Wednesday night home games of the Padres if they take advantage of the CRA offer.

Exchange tickets will be on hand at SD employee services on Mondays preceding the Wednesday dates. They may be turned in at the Westgate Park box office for either box seats or general admission seats with 75 cents off regular prices of $2 and 1.25.

First Wednesday home game is tonight (April 26). Others coming up are May 3 and 24.



GREATER YATER—W. H. "Bill" Whitley (Dept. 6) poses with large Yater Memorial golf trophy which is awarded on perpetual basis. "Dusting it off" is Molly Dowell (Dept. 3) who takes reservations for CRA golf events. Whitley won Yater championship this month with 126 net.



LET'S ALL GO—Say Anne Filip (Dept. 1-34) and Mary McNeil (Dept. 11) as they learn about CRA-sponsored Hawaiian tour for Convair people from Martha Woodberry of SD employee services (at left). Second plane is filling fast for July flight.

First Hawaii Tour Fills Fast, Second Scheduled July 1-9

So many Convair people have a yen to visit the "Islands" that a second plane is being filled for the CRA-sponsored "Hawaiian Holiday" tour in July.

First plane was filled by 87 Convair SD and Pomona travelers for the July 15-23 tour within a couple of weeks after the $298.50 trip was announced.

The second tour now open to any Convair person eligible for a vacation will be held earlier in the month, July 1-9. Already 54 at Convair SD have expressed an interest in the eight-day Hawaiian jaunt. Anyone who wishes to join the crowd heading west must deposit $50 at SD employee services by May 15. Remainder of the tour cost for all passengers on either July 1-9 or July 15-23 flights must be paid by June 1.

The price includes round-trip transportation and hotel room, two to a room, as well as special sight-seeing tours arranged by Fugazy Travel Bureau, Inc. Those already signed for the July 15-23 trip will be staying at Princess Kaiulani Hotel at Waikiki Beach.

A briefing session for Convair people was held last Friday in the cafeteria executive dining room with W. J. Brown, sales manager for the travel agency, answering questions. Another meeting will probably be scheduled in June before the dates of the Pan-American World Airways flights.

Information is available at SD employee services, Plant 1, ext. 1245.

271 Rose Entries Make SD Show Biggest Ever

Over 2,000 flower lovers crowded into the Floral Association Bldg. April 9, to admire more than 500 rose blooms displayed in the largest flower show ever held by Convair SD Garden Club.

"This was, by far, the best show we have ever had, both from the number and quality of entries and interest by visitors," said E. L. Zimmerman, CRA commissioner. "In fact, there wasn't room enough for everyone who wanted to see the displays. And, the blooms were of such high quality that it took the judges two hours to decide on winners."

A total of 305 entries were accepted in the nine divisions with the 271 rose entries comprised of over 500 blooms. Rose entries were: single rose blooms, 166; three roses, 80; six mixed, 6; florabundas, 9; grandifloras, 10. Additional entries were: arrangements, 22; corsages, 6; children, 5-11, 3; juniors, 12-16, 4.

Blue ribbon winners were: Single blooms—white, C. J. Lewis (Dept. 250); light yellow, E. L. Zimmerman (Dept. 401); dark yellow, Mrs. Walter McVey; orange and orange blend, Fred Hart (Dept. 44-3); light pink, Mr. and Mrs. C. J. Lewis; dark pink, O. J. Snyder (Dept. 91); light red, Carolyn J. Buman (Dept. 597); dark red, Mildred Clark (Dept. 400); Peace rose, Ora Carpenter (Dept. 400-0); yellow blend, Ora Carpenter; pink blend, Ed E. Robichau (Dept. 288-2, retired); red blend, Carolyn J. Buman; Charlotte Armstrong, Ora Carpenter; mauve, Mrs. H. S. Boyd.

Three roses, one variety—white, Evelyne Thrall (Dept. 3-2); light yellow, Gloria Jodka (Dept. 91); dark yellow, Gloria Jodka; orange and orange blend, Fred Hart; light pink, Gloria Jodka; dark pink, Ora Carpenter; light red, LeVonne Splinter (Dept. 1-61); dark red, Ora Carpenter; Peace rose, Esther Barksdale (Dept. 15); Charlotte Armstrong, Ora Carpenter.

Three mixed roses—W. A. Carpenter.

Six mixed roses—O. J. Snyder (Dept. 61).

Florabunda—Fred Hart (Dept. 44-3).

Grandiflora — Robert S. Reed (Dept. 44-3).

Arrangements—miniature, Mrs. C. M. Bley; small, Mrs. R. A. Freedman; medium, LeVonne Splinter; large, Jean Henderson (Dept. 401); dry, Mrs. Bley.

Corsages—roses, Mrs. Charles Inman; any cut flower, Carolyn J. Buman; orchids, Mrs. Fred Hart.

Children, 5-11 yrs.—Janice Zimmerman; juniors, 12-16—John Bley.

Best of show—princess of show, Fred Hart; best single rose, Mildred Clark; best three roses, Mrs. Carpenter; best six roses, O. J. Snyder; best florabunda, Fred Hart; best grandiflora, Robert S. Reed; best arrangement, Jean Henderson; best corsage, Mrs. Hart; best child's entry, John Bley.

Judges of roses were Mrs. Benson, Al O'Bleness, James Kirk, all of the San Diego Rose Society. Mrs. Henry Middleton and Mrs. Tommy Getz judged other classes.

Garden Club members will meet May 10 at Floral Association Bldg., Balboa Park, with dahlia tubers and crysanthemum plants to be on hand for distribution. Next scheduled show will be the dahlia show in August.

Beach Shoot Set For Camera Club

Shutter bugs at Convair SD have chosen a photogenic setting for their "pretty girl at the beach" model shoot this Saturday (April 29).

Linda Chandler will be the pretty girl and Wind and Sea Beach at La Jolla the place for the 1 p.m. event. The CRA camera fans will gather at the north end of the beach.

Convair club members will be taking part in the May 21 annual Photorama in Balboa Park, using various sets available to camera enthusiasts.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

BADMINTON — Open play Tuesdays, 7:30 p.m., Federal Bldg., Balboa Park.

BRIDGE CLUB—Sessions each Tuesday night, 7:30 p.m., Barcelona Hotel, 326 Juniper St.

CAMERA CLUB—Model Shoot Saturday (April 29), 1 p.m., Wind and Sea Beach, La Jolla.

CHORALAIRES — Rehearsals each Monday, 7:30 p.m., CRA Clubhouse, Pacific Hwy.

GARDEN CLUB — Meeting May 10, 7:30 p.m., Floral Assoc. Bldg., Balboa Park. Bring extra dahlia tubers and chrysanthemum roots.

GOLF—Annual Convair Golf Championships June 17-18, 24-25, Flying Hills. Entries accepted through May 26 by calling ext. 1705, Plant 1.

ICE SKATING—Joint SD-Astro trip to Glacier Falls arena, Anaheim, April 30. Meet at executive parking lots at both sites 7:30 a.m. For information call Bud Davies, Astro ext. 3441, or Martha Woodberry, SD Plant 1, ext. 1245.

JUDO—Workouts and instruction every Thursday in CRA Clubhouse, Pacific Hwy., 7-8:30 p.m.

MOVIES — Reduced-price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB — Next shoot May 14, 9 a.m., San Diego Police Pistol Range, Federal Blvd. & Home Ave.

RADIO CLUB—Swap night tomorrow (April 27), 7:30 p.m., Radio Club Headquarters, Harbor Drive.

RIDING TEAM — Trail ride April 30 from Terria Ranch, Hwy. 67 and Poway Rd. For reservations call Luke Barbour, ext. 2546, Plant 1. Next meeting May 4, 7:30 p.m., Gillespie Field Clubhouse.

ROCKHOUNDS — Weekend field trip to Gold Rock Ranch, April 29-30. Meeting May 11, CRA Clubhouse, Gillespie Field, 7:30 p.m.

SOFTBALL — Final managers' meeting May 11, 5 p.m., CRA Clubhouse, Pacific Hwy.

SWIMMING — Free family swim night Saturday (May 6), 7-9 p.m., Mission Beach Plunge. Tickets at SD employee services.

Keg Awards Banquet Set For May 20

Annual Convair SD bowling awards banquet for CRA league and tournament champions will be held Saturday (May 20) at Lawton's Restaurant, 8090 University, La Mesa.

League and tourney champs may make reservations by contacting employee services, ext. 1245, Plant 1; or Jim Hayman, CRA commissioner, ext. 1155.

Following are top award winners of the plant championship tourney concluded this month at Pacific Recreation.

Team: (scratch) Delta Darts, 2,710; (handicap) Holy Rollers, 3,087; (mixed) Head Hunters, 2,996.

Doubles: (men's scratch) John Edwards, Al Hoag, 1,189; (men's handicap) Jim Robson, Paul Wayman, 1,341; (mixed scratch) Forest Erwin, Vi Ballheimer, 1,107; (mixed handicap) Donna Hampton, William Trepanier, 1,233.

Singles: (men's scratch (Jim Rodgers, 656; (handicap) Rocky Armendariz, 701; (women's scratch) Kay Turner, 605; (women's handicap) Helen Grijalva, 673.

All Events: (men's scratch) Jim Rodgers, 1,821; (men's handicap) Sam Leverett, 1,939; (women's handicap) Jean Gilfillan, 1,864; (women's scratch) Edith Hood, 1,497.





NEW FRONTIER—"Perimeter Engineering" effort has been launched at Convair San Diego to bring operating division's capabilities to attention of potential customers throughout country. At right, two "engineering salesmen," M. R. Yale and B. B. Shaffer, stow gear prior to departure on air trip. Other photo shows "dry run" of presentation conducted by C. S. Brandt, chief of product support design section, who heads effort. From left are S. E. Beemer, C. J. Jackson, R. E. Dietz, V. J. Park, Brandt. SD Perimeter Engineering Business Activity Teams have called on over 50 businesses, military installations in last two months.



VIP RIDE—Maj. Gen. Dan F. Callahan, commander Mobile Air Materiel Area, Brookley AFB, Ala., expressed himself as "favorably impressed" after first TF-102A flight. Convair SD field service rep at Alabama base is R. L. Hart.

Clocks to Go Ahead Hour on Weekend

Convair people at all California locations will be reporting to work an hour "earlier" next Monday, May 1.

Daylight Saving Time goes into effect this coming Sunday (April 30) when clocks will be set one hour ahead at 2 a.m., according to California state law.

The change in time affects Convair plants at San Diego, Astronautics, Pomona, and all off-site locations in California.

Tool Society Honors Astro With Plaque

At a recent meeting of the American Society of Tool and Manufacturing Engineers (ASTME), Convair Astronautics was honored with presentation of an engraved plaque.

The company was cited for "support of further research in tool and manufacturing engineering and the advancement of scientific and educational progress in creative manufacturing."

A. E. Hill, Astro night manager, accepted the plaque from Tom Conlon, ASTME chairman.

'Engineer-Salesmen' Crisscross U.S. In Search For More Design Business

Convair San Diego "scientific salesmen" are crisscrossing the country these days as the advance guard of a bold, new effort to bring more design engineering tasks into the home plant.

The "product" they sell is Convair San Diego—its tremendous engineering talent; its wide experience in many fields; its broad battery of technical skills; its comprehensive facilities and laboratories.

But more than this, in addition to solving design problems, Convair SD is trying to get in "upstream," in other words, determine and define problems before contacting customers with a selling effort.

Official name of this aggressive action which has been under way for some three months is "Perimeter Engineering."

"The name describes our capability to create and design products and equipment which surround and support our or the potential customer's prime products," says C. S. Brandt, chief of product support design section, who heads the effort.

The program was formally launched with the selection of 10 top engineers who were exposed to a series of training classes which stressed Convair SD's engineering know-how, talents, capabilities and experience.

At the same time, "Perimeter Engineering" brochures, charts, and other visual aids were prepared, trips were scheduled and advance contacting and meeting arrangements worked out.

"Results to date have been encouraging, though we feel this is only the beginning," says Brandt. "Many different tasks have been uncovered and we have prepared and are in the process of preparing a number of proposals."

An important part of the Perimeter Engineering effort is the "personal" attention given each customer.

"After the first client contact is made on a program, a project leader is assigned and he provides the single communication and responsibility link between the client and Convair," says V. J. Park, who is in charge of Perimeter Engineering business requirements/promotion and intelligence/planning and task application.

"Thus project controls are short, direct and efficient," said Park. "The reporting system is flexible and may be tailored to the client's requirements. The project leader, in conjunction with a design and administrative team, can provide comprehensive and fast response."

In what specific areas are tasks being sought? At the present time the following four fields are being given the most attention:

1. Aerospace ground equipment, specialized equipment and mechanical systems.

2. Electronic and electrical system installations.

3. AE (architect engineer) specialized facilities and joint ventures. For instance—test chambers of various types or missile launching facilities.

4. Cryogenic systems—roughly defined as systems handling extremely low-boiling point fluids such as liquid oxygen, nitrogen, hydrogen and helium.

Two other areas of increasing interest at this time are marine engineering and innerspace engineering.

In marine engineering there are many applications where the aircraft approach can be utilized and adapted. For example: design and installation of aluminum superstructure on ships.

Various aspects of innerspace engineering, or "under water" engineering, are being investigated. Many similarities between aircraft engineering and innerspace engineering become evident when allowance is made for the change in environment.

Park points out that prospective clients are briefed on Convair SD's wide experience in perimeter engineering activity which has been averaging some 220 tasks per year.

A few of the better-known projects in this area are missile launchers, liquid oxygen supercooler, missile launch control systems for research and development sites, propellant loading system for Atlas silos, B-58 tail turret stand, F-106 fuel system checkout cart, quick engine change checkout cart, system trainer, and data acquisition and processing systems.

Perimeter Engineering Business Activity Teams have made more than 50 presentations during the past two months at businesses and military installations throughout the United States.

Four points especially emphasized at presentations are Convair SD's vast array of design talents; its fast response to customer's needs; its rapid comprehension of customer's problems and ability to come up with efficient, imaginative solutions; its in-house consultant services and testing facilities.

At present 10 more engineers are in the midst of the training program taught by D. S. Clark of educational services-engineering and will soon hit the road to bring the Convair story to clients.

"It is not unlikely that our Perimeter Engineering effort will also result in more production jobs in the plant," says Brandt. "A mainline program in the future could also come about through these efforts."

Perimeter Engineering enjoys the same organizational relationship as other mainline programs of the operating division.

Perimeter Engineering staff members include S. E. Beemer who assists Park; C. L. Jackson is in charge of the project leader group; R. E. Dietz heads special project pre-design activity.

Stresses of Flight Simulated With Jet 990 Speed Capsule

Speed capsule for Convair's 990 jet transport was put through static proof load testing last week at Convair SD structures test laboratory to prove its airworthiness on the 990 wing.

Designed by Convair engineers to reduce shock waves, and resulting drag, across the 990's supersonic wings, four of the advanced aerodynamic devices are attached to the upper surface—two to each wing. In addition to their primary purpose, each capsule (or anti-shock body) is a supplementary fuel tank, holding nearly 300 gallons.

The testing program, under direction of Lyle Minkler (Dept. 68) as project engineer, was divided into three sections. In the first phase, inertial loading, the body, mounted on fixtures simulating actual positioning on a wing, was tested to design limit load for reaction under such conditions as vertical movement of air (gusts of wind), and landings.

Next, it was put through a repeat cycling test. One hundred cycles equalled one flight with loads exerted from zero to 50 per cent of limit.

The final test phase concentrated on the body's function as a fuel tank. In this, the "bubble" test, liquid soap was spread over all riveted sections and internal air pressure applied. In case of leakage, bubbles would appear on the outside surface.

Following completion of the static proof load testing, the capsule is tabbed to go on ship No. 3, now in structures test lab for proofing.

Anti-shock bodies for ships 8, 9, and 10 are now on the production line in Dept. 142, east side of Bldg. 2 at Plant 1. Mating is done in the second station of wing primary with ship No. 6 the last to get the new look.

Astro and SD Volunteers Help Build Schoolhouse in Mexico

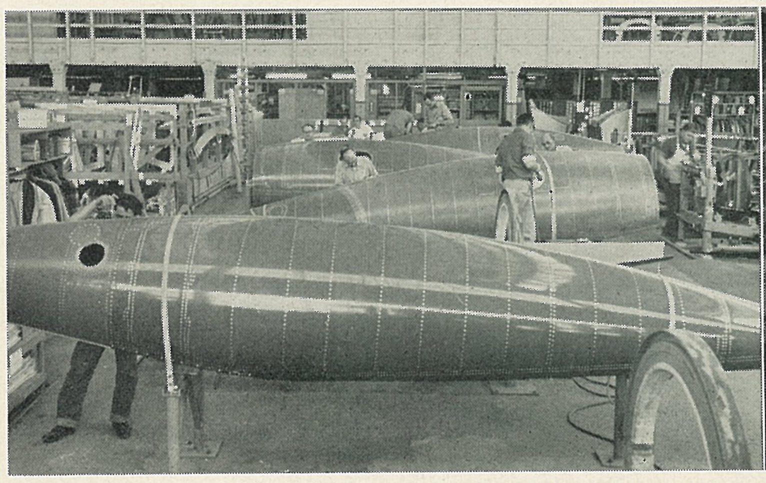
A "good neighbor" project in which Convair SD and Astronautics employees took part has resulted in additional school facilities for a suburb of Tijuana, Baja California, below the border from San Diego.

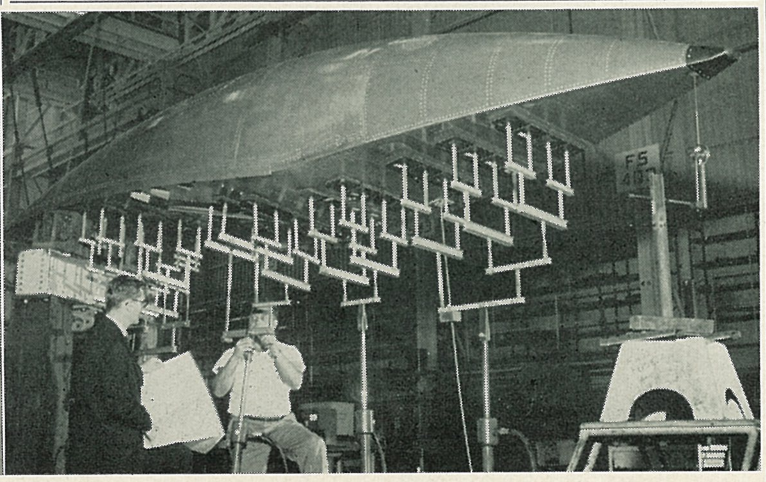
Casa de Todos (translated "house for all") School was dedicated April 16 when Astro's Thomas Scholder (Dept. 551-5) turned over the keys to Mrs. Maria Meza.

Scholder and five other Convair employees, Don Munger, Marion Mayall, Norman Lorenzen and Bill Thompson of Convair SD, and Jim Baker of Astro, have worked over a period of six months to help complete the 30 by 46-foot concrete block school.

Voluntary help, both in the form of labor (an estimated 3,000 hours), cash and material donations, have made the school possible. It replaces a frame building and will be used for teaching kindergarten through second grade as well as night classes in English, hygiene and nutrition.

Leadership in the program, with Scholder as building chairman, has been through various religious groups.





WING CAPSULES—At right anti-shock body, which distinguishes wing of jet 990, undergoes static testing with Lyle Minkler of SD structures lab and C. E. Stuart, test lab mechanic, adjusting whiffle tree. At left is production line in R. E. Elo's Dept. 142 at SD Plant 1. Now in the works in Bldg. 2 are bodies for ships No. 8, 9, 10. Sixth 990 just received canoe-shaped parts.

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GENERAL DYNAMICS

Published every other Wednesday
General Dynamics Corporation

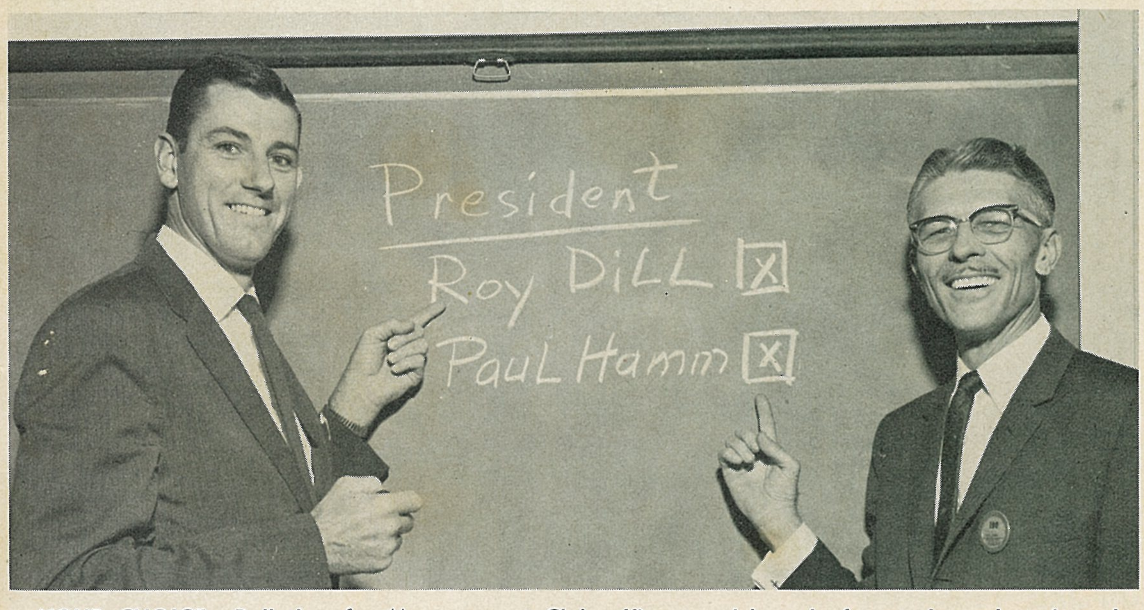
Convairiety

San Diego
Palmdale - Holloman
EDITION

San Diego news office: Plant 1, Bldg. 32, ext. 1071.

Vol. 14, No. 10 — Wednesday, May 10, 1961

SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. — ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.



YOUR CHOICE—Balloting for Management Club officers and board of control members is under way this week at San Diego Division. Presidential candidates above are pointing to their respective names. Members are urged to vote as soon as possible and get ballots back in return mail.

Gen. Dynamics Creates Five New Divisions

General Dynamics Corporation last week announced the creation of five new operating divisions, two major organization groups, and a realignment of corporate executive responsibility.

"The continued increase in the size and complexity of the Corporation," said Frank Pace Jr., chairman and chief executive officer, "has made it advisable to modify our structure to meet current and future requirements. The changes are designed to provide a higher degree of managerial control and at the same time give flexibility to those individual divisions which serve essentially different markets and technologies."

The new Divisions, all formerly components of the Convair Division, are:

General Dynamics/Astronautics
General Dynamics/Fort Worth
General Dynamics/Pomona
General Dynamics/San Diego
General Dynamics/Daingerfield

The former Convair General Office at San Diego will be eliminated. Key personnel will be reassigned to the corporate staff or to operation divisions.

"By reducing the number of management layers and moving the operational headquarters of General Dynamics to San Diego," Pace said, "we will bring top management into closer contact with operations, and costs will be reduced."



Earl D. Johnson

While Earl Dallam Johnson, president of General Dynamics, will maintain offices both in New York and San Diego, he will change his residence to San Diego.

"This will place direct corporate supervision at the center of some 75% of our total business," said Johnson.

"It will provide top management with a better opportunity for first-hand assessment of operations and personnel, and permit more immediate implementation of policy. It will also speed up the reaction time to customer needs and requirements."

The 13 operating divisions will be divided into two major groups, each under the supervision of an executive vice president of the Corporation, reporting directly to Johnson.

C. Rhoades MacBride, formerly executive vice president-opera-

(Continued on Page 3)

Baseball Drawing For Padre Tickets Closes Wednesday

Baseball fans at San Diego have until next Wednesday (May 17) to submit entries for the second free-ticket drawing to Padre home games.

CRA will be giving lucky winners passes to May 23, 24, 25 games with Tacoma; and May 26, 27, 28 games vs. Salt Lake City.

Entries must be dropped in the baseball drawing boxes before 3:30 p.m. Boxes are located at SD employee services counter, Plant 1; Rose Canyon, in the office of Virginia Cannon, ext. 2125; at the ramp, in office of Leonard Smith in Bldg. 37.

Each slip must contain name, clock number, shift, department number, location, and plant phone extension. Only one entry is allowed for each person.

Safety Council Honors Convair on 3-yr. Record

The San Diego Division has received a 1960 Award of Merit from the National Safety Council for its low lost-time accident frequency and severity rate based on a comparison of three years' experience.

M. C. Val Dez, chief safety engineer at San Diego, said the award is one of the most coveted in the safety world because unlike "short term" awards it takes into account safety performance over an extended period of time.

Winners are determined by comparing their safety performance during 1960 with both the overall industry average and their own record during the preceding three years.

The division bettered its performance in the comparison by 58 per cent in the accident frequency category and 87 per cent in the severity statistics.

Fred Lubet of the National Safety Council said San Diego's score indicates an "outstanding safety record," and added that not even 10 per cent of plants enrolled for council membership win awards in any year.

Two addditional safety awards have been conferred upon San Diego during the past two months.

One is an Award of Honor for working a total of 6,107,092 manhours between Sept. 18 and Nov. 14, 1960, without a disabling injury.

The other is for San Diego's standing in the Aerospace Section Safety Council Contest during 1960.

Calif. Apprentice Council Convenes

H. W. Rubottom, chief of San Diego educational services, met with other members of the 14-man California Apprenticeship Council at its quarterly meeting in San Diego April 27-29.

Rubottom, as council chairman, conducted sessions dealing with administrative and legislative proposals for improving the state's apprenticeship program. D. C. Wilkens Jr., manager of SD industrial relations, was speaker at the Friday evening dinner session at El Cortez Hotel.

Also attending from San Diego was L. W. Turner, apprenticeship coordinator for educational services.

880-Ms, 990s Flying Daily At San Diego

As many as four 880-Ms and 990s a day have been streaking skyward from Lindbergh Field as flight tests of San Diego Division's newest jet transports continue.

The 880-M flight testing passed a significant milestone last month when Federal Aviation Agency certification was started and an FAA pilot took controls of the plane for the first time.

This week ship No. 1 was scheduled to go to Edwards AFB for landing and takeoff performance tests as FAA testing continues on schedule.

A provisional FAA ticket for the 880-M is expected in early June which will enable three airlines to take deliveries of the planes next month and start pilot training programs.

During June deliveries of the 880-M are slated to Civil Air Transport; Avensa of Venezuela; and Japan Air Lines.

880-M deliveries will continue at a rapid rate during July. Present schedules call for deliveries to Alaska Airlines, Japan, and Federal Aviation Agency.

(Continued on Page 3)



SAFETY FIRST—M. C. Val Dez (left), chief safety engineer at San Diego, and Dorothy Graham, secretary to D. C. Wilkens Jr. (right), manager of industrial relations, decide where to hang 1960 Award of Merit San Diego received last month from National Safety Council.

Three New Departments Organized at SD In Material Organization Under Bruce

Three new departments within the material organization have been formed at San Diego Division. All become the direct responsibility of W. R. Bruce, SD manager of material.

Dept. 45, procurement planning, and Dept. 46, material disposition, are headed by G. W. Zahrte, material operations manager.

The third, Dept. 47, vendor termination claims, is under C. M. Gauss, material cost manager.

Reporting to Zahrte are J. F. Scanlon, chief of material control; L. F. Tubbs, chief of procurement planning; and F. R. Fields, chief of stores and traffic.

Reporting to Gauss are J. D. Fink, chief of material estimating; K. M. Johnson, chief of material cost and budgets; and chief of material price analysis.

G. E. Blain, as chief of material contracts and services, is in charge of newly-formed functions in Dept. 4. They are material services (4-1), material procedures (4-2), and material contract analysis (4-3).

W. H. Parry is project administrator 880/990 program within the material department to integrate and maintain surveillance over all material responsibilities pertaining to the jet transport program.

Replacing Tubbs as purchasing agent is P. G. Peninger.



COINCIDENCE—By happenstance, two General Dynamics products meet far from "home." Atlas missile convoy, en route to Fairchild AFB, rolls past F-106 stationed at Geiger Field, Spokane, Wash.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period May 1 through May 15.

Thirty-five-year: Dept. 140, W. R. Panke.

Twenty-five-year: Dept. 6, C. A. Mohr; Dept. 25, N. F. LaGamma; Dept. 90, A. E. Andress; Dept. 203, C. M. Gatchell; Dept. 401, R. S. Watt.

Twenty-year: Dept. 6, L. C. Beckett, F. L. Thornburg; Dept. 15-4, R. K. Hall; Dept. 31, Donald Lyons, A. C. Oehler, N. J. Perkovich; Dept. 91, Frank Burns; Dept. 138, W. S. Nader; Dept. 188, R. H. Brent, R. P. McNally, L. C. Stuckey Jr.; Dept. 292, K. S. Kelly; Dept. 401, A. J. Martino, G. E. Mayer.

Fifteen-year: Dept. 3-6, A. D. Comito; Dept. 6, F. A. Sisson; Dept. 15-4, F. D. Laffoon; Dept. 31, G. C. Johnson; Dept. 91, C. F. Petersen; Dept. 141, R. L. Malone; Dept. 180, R. E. Everson; Dept. 400, Eleanor V. Brolaski, Helen B. Radici; Dept. 401, H. K. Perry.

Ten-year: Dept. 3, D. R. Frisk, J. N. Marchand, J. W. Thompson, David Wasserman; Dept. 5 (GD/E), N. R. Niemet; Dept. 6, G. J. DeLong, J. W. Fitzgerald, Helen M. Grijalva, R. E. Miller, Bert Scott Jr., R. E. Shankle; Dept. 7-10, Phyllis G. Perez.

Dept. 14, Clotilde M. Cyrus, Medoline J. Davis, Tonie Leipert; Dept. 15, D. J. Olson; Dept. 21, Denzil Lindsey, J. M. Sullivan; Dept. 25, R. L. Rusk, J. C. Sanchez, A. G. Thomas; Dept. 31, R. J. Baker, W. H. Murray, Fred Westfall Jr.; Dept. 45, Doris T. Veal.

Dept. 46, C. W. Glasgow; Dept. 69, T. E. Williams; Dept. 91, Claire A. Richmond, Pauline S. Russell; Dept. 95, R. E. Fetterly, J. K. MacPherson Jr.; Dept. 101, N. G. Morrill; Dept. 116, Margaret C. Eminides; Dept. 120, Mary H. Teehan; Dept. 139, Lois G. McCoy; Dept. 141, P. G. Burks, G. D. McGlothin; Dept. 148, R. A. Garner; Dept. 171, J. J. Grzyb; Dept. 188, Ruth S. Allen, Glynn J. Hendrix; Dept. 192, L. C. Fleetwood Jr., V. C. Harris, C. D. Hill, Jessie P. Melton.

Dept. 197, G. C. Buettner, Mary I. Wharton; Dept. 205, B. A. Zigarelli; Dept. 215, Marilynn M. Louder; Dept. 271, J. S. Duncan; Dept. 288, Ralph Wedel; Dept. 400, F. E. Cooper; Dept. 401, B. J. Bond, Nellie V. Perkins.

HOLLOMAN AFB

Ten-year: Dept. 313-6, A. J. Maracchini.

PALMDALE

Ten-year: Dept. 321-1, C. G. Belz.

Promotions

SAN DIEGO

Promotions to or within supervision effective April 24.

Dept. 2-0, Manager, Convair SD: To manager of contracts and customer service, G. H. Buchner.

Dept. 4-0, Material Office and Administration: To material cost manager, C. M. Gauss Jr.

Dept. 5-0, Long Range Planning: To manager of long range planning. I. D. Sykes Jr.

Dept. 6-53, Engineering: To reliability project engineer, R. W. Perrin, R. V. Shields.

Dept. 15-7, Customer Service: To chief of field modifications, J. L. Carton Jr.

Dept. 21-1, Transportation Operations: To transportation asst. foreman, G. A. Young.

Dept. 25, Plant Engineering: To foreman, W. H. Apple. To asst. foreman, B. L. Gammon, M. J. Lee, N. D. McFarland, L. J. Renz, V. C. Somers.

Dept. 119, Metal Bond Fabrication and Assembly: To asst. foreman, R. E. Carson.

Dept. 129, Trim: To asst. foreman, B. C. Lovelady.

Dept. 140, Pod and Pylon Assembly: To asst. foreman, R. C. Woker.

Dept. 142, Jet Transport Wing Skin and Stringer Panel Assemblies: To foreman, F. H. Nipper. To asst. foreman, G. W. Marx Jr.

Dept. 148, Jet Transport Major Mate: To asst. foreman, F. T. Line.

Dept. 160, Jet Transport Final Assembly: To asst. foreman, R. Lujan, W. Willett.

Dept. 188-6, Inspection, Plant 1: To inspection asst. supervisor, J. M Wallace.

Dept. 182, Manufacturing Control, Plant 1: To M/C supervisor, E. W. Avlon. To M/C general foreman, R. J. Graham. To M/C asst. supervisor, C. R. Bowman. To M/C asst. foreman, C. E. Thornton.

Dept. 197, Quality Control: To inspection asst. supervisor, W. W. Graham. To prod. lab asst. supervisor, P. S. Rader.

Dept. 223, Welding: To asst. foreman, W. L. Pritt.

Dept. 292, Manufacturing Control, Plant 2: To M/C asst. supervisor, D. M. Dvorak. To MC/ foreman, C. T. Ufen. To M/C asst. foreman, L. R. Mathews.

PALMDALE

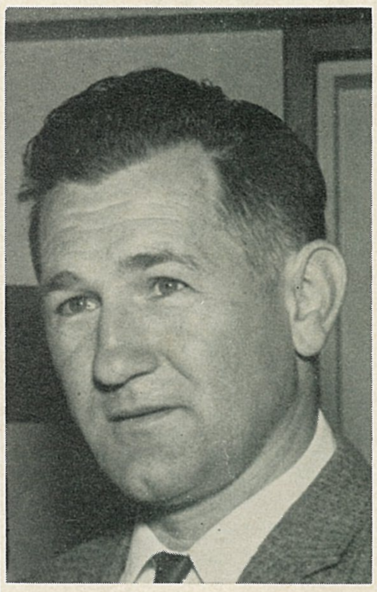
Dept. 326, Liaison Engineering-Palmdale: To chief of liaison, F. C. Hirsch.

Deaths

SAN DIEGO

FEARN—Alvin, Dept. 140. Died April 22. Survived by wife, Daisy M., a son; a daughter; two grandchildren.

HAMLIN—Floyd L., Dept. 141. Died April 24. Survived by wife, Edna B.; two daughters; a brother; two grandchildren.



FINALLY—W. H. Fink, Dept. 6, now sports a 25-year service emblem. He was eligible last September but outside assignments have kept him on move. W. W. Fox, San Diego chief engineer, made presentation.

Retirements

SAN DIEGO

DAVIS—Robert L., Dept. 160. Seniority date Oct. 1, 1947, retirement effective April 21, 1961.

DURSON—Floyd R., Dept. 31. Seniority date Aug. 20, 1947, retirement effective April 28, 1961.

GORETSAS—George J., Dept. 25-2. Seniority date March 5, 1952, retirement effective April 25, 1961.

LAMPROU—Speros, Dept. 102. Seniority date March 6, 1951, retirement effective April 28, 1961.

MONARD—Joseph A., Dept. 21-1. Seniority date Feb. 28, 1956, retirement effective April 28, 1961.

NANNINGA—William H., Dept. 25-9. Seniority date Oct. 2, 1950, retirement effective Jan. 19, 1961.

RAYMAN—Rainold R., Dept. 197-8. Seniority date Feb. 19, 1948, retirement effective April 21, 1961.

SCHRADER—Louis F., Dept. 149. Seniority date Feb. 12, 1948, retirement effective April 28, 1961.

WRIGHT—Alvin J., Dept. 25-9. Seniority date Jan. 15, 1952, retirement effective April 19, 1961.

Personals

SAN DIEGO

May I express my deep appreciation to Convair personnel for the kindness and beautiful flowers. Garland (Dept. 292-1) was very proud of his association with Convair and I know he too would be grateful.

Mrs. Garland F. Byrne

* * *

We wish to express our deepest gratitude to those whose blood donations made possible the lifesaving operation for our daughter, Talia. Special thanks are extended to Messrs. Swanson, Hershberger, Goldansky, Booker, Nerenberg, Woodward, Eilers, Uebersax and Pallulat, and Miss Koenig, for their timely and generous donations. The combined gifts, encouragement, prayers and personal efforts are greatly appreciated.

Mr. and Mrs. Oscar A. Morris, Dept. 321, Astro.

Births

SAN DIEGO

BARTOLOMEI — Daughter, Jeanne Marie, 6 lbs., 15 oz., born April 25 to Mr. and Mrs. George J. Bartolomei, Dept. 190-2.

BETTIS—Son, Rex Allen, 7 lbs., 12 oz., born April 22 to Mr. and Mrs. Lenard Bettis, Dept. 25-6.

BOATMAN — Daughter, Mary Kathryn, 7 lbs., 3 oz., born April 8 to Mr. and Mrs. Jesse G. Boatman, Dept. 160-2.

BURKE—Son, Stephen, 7 lbs., 6 oz., born April 12 to Mr. and Mrs. Robert Burke, Dept. 137.

WOOD—Son, Joseph, 7 lbs., 10 oz., born April 15 to Mr. and Mrs. George Wood, Dept. 141-1.

Discount Tickets For Padre Game

Discount tickets for the Wednesday night (May 24) game of the Padres vs. Tacoma will be on hand at Convair SD employee services the Monday of that week.

Tickets may be exchanged at Westgate Park for any seat at 75-cent reduction.

★ *Convairiety* ★

Founded Sept. 1, 1948. Published in six editions (Fort Worth-Daingerfield, San Diego-Palmdale-Holloman, Astronautics, Astronautics Off-Site, Pomona and the Mail) by Convair Industrial Relations, General Office, San Diego, Calif. Logan Jenkins, editor-in-chief.

Approximate current total circulation, over 70,000. News items and letters to the editor are solicited, but no advertising can be accepted.

SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Fred Bettinger, news editor; Grayce Fath, Helen Pemberton.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.

Lamb and Dewey In New Posts

Appointments of N. W. Lamb as advance planning administrator and W. J. Dewey as program control administrator have been announced by I. D. Sykes Jr., San Diego manager long range planning.

Sykes said Lamb will be responsible for product analysis, advance program planning and new business control. His duties will include new business proposal authorization, planning and preparation responsibilities of the long range planning department.

Dewey will handle both commercial and military program control which includes preparing, and monitoring performance to all authorized operating division projects. He will continue to be responsible for preparing program schedules contained within sales proposals.

'West Side Story' Discount Tickets On Sale Tomorrow

Tickets go on sale tomorrow (May 11) at Convair SD employee services for the first Broadway musical to show during the inaugural season of San Diego's new Circle Arts Theatre.

"West Side Story," starring Larry Kert and Carla Alberghetti, will be the first production of the eight to be presented this summer. Five hundred seats in all price ranges have been reserved by CRA for Convair SD people for the June 4 showing. The Sunday night performance starts at 8:30 p.m.

Discount prices are: $2.75 for $3.40 seats; $2.20 for $2.75 seats; $1.80 for $2.25; and $1.40 for $1.75 locations. Every seat is called a "good" seat in the round theater building.

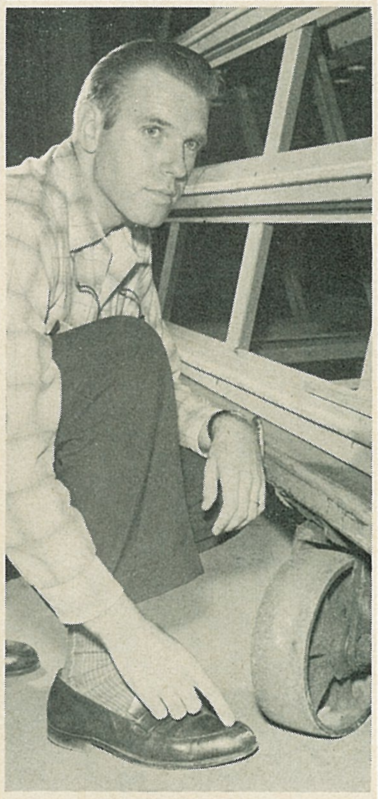
Circle Arts Theatre is located off of Highway 395, north of Clairemont Mesa Blvd.

Water Ski Outings Held on Weekends

Organized water skiing on Mission Bay will be held any weekend this month if enough Convair SD enthusiasts want to take part, said Gene Sevigny, CRA commissioner.

All they have to do is contact Sevigny at ext. 1032, or Herb Wexler, ext. 2366, both SD Plant 1, to express an interest or for information on weekend plans.

A regular skiing schedule for the summer season will be outlined at the May 25 meeting. Until then skiing will be held on a phone-call basis.



LUCKY—Bruce Tabbert, Dept. 192 dispatcher at San Diego, might have lost some toes if he hadn't been wearing safety shoes when heavy A frame steel wheel went over foot.



POSITIVE APPROACH—Somewhat different than many "pep" type signs throughout San Diego Plant 1 is that above. Dept. 139 was proud of fact that their task on airplane was done on schedule with near-perfect completion and they posted sign to let everyone know it. Teamwork among all departments is emphasized.

1,500 New Savings Bond Buyers Join Payroll Deduction Plan

A total of 1,520 persons at San Diego Division joined the U. S. Savings Bond program last month.

They closed ranks with 8,873 others at San Diego who had been authorizing bond deductions before start of the plant-wide drive. They also joined 8 million workers, employed by 45,000 business firms, who are part of the payroll savings plan.

Other pertinent statistics at Convair San Diego show that participation in the bond program stands at 51 per cent of plant population (which is an increase of 7½ per cent as a result of drive) and that the average size of the weekly bond purchase is $9.30.

SD Bar Assn. Accepts Associate Members

Convair lawyers who are members of the Bar in states other than California are eligible for associate membership in the San Diego County Bar Association, announces L. V. Nigro, Convair tax attorney.

Nigro (Dept. 1-23), recently named to the SD Bar membership committee, explained that attorneys in good standing in any state may participate on an active basis, attend all functions and receive the group's news letter. They do not have voting privileges.

Anyone eligible may contact him at ext. 2469, SD Plant 1, Bldg. 19.

20 Rock Collectors Make Ogilby Jaunt

Rockhounds at Convair SD braved the broiling sun in their search for specimens during their April 29-30 trip to Ogilby.

Twenty hardy rock hunters found agate, dumortierite, and petrified palm suitable for both specimens and cutting as temperatures soared to above 100 degrees.

Mrs. Donna Rutkowski, assistant director at the Naval Hobby Shop, is rescheduled to speak on "Working with Silver" at the May 11 meeting at Gillespie Field clubhouse. Meeting time is 7:30 p.m. Mrs. Rutkowski was unable to keep her original speaking date in March.

Hoedowners Slate Pecan Park Picnic

All square dancers at Convair SD will gather for the annual Hoedowners picnic this month, Sunday (May 21), at Pecan Park.

A full afternoon and evening of fun and eating is planned, said Maury Scholz, CRA commissioner. Games and contests with prizes will fill the afternoon hours from 1 to 4 p.m. Following a potluck dinner, dancing in the outdoor pavilion will climax the day's program.

Families are asked to bring their own food with coffee and punch supplied by the club.

CONVAIR GIRL WEDS

Ida Mae Savary of Model 8 field operations (Dept. 292-5) at Convair SD was married May 6 to Joe Lozinski of the Modern Bakery. Ceremony took place in Holy Spirit Church in San Diego.

Convair Softballers Slate Road Games

Convair-Astro ball players will be hitting the road in the next couple of weeks as league play in the Western Softball Congress goes into its second month.

This Saturday night (May 13) the joint SD and Astro team will meet Los Angeles at Astro's ball park.

The following weekend (May 20) Convair-Astros are scheduled to go to Huntington Park. Then follows a two-day play—Long Beach on Friday (May 26) and San Pedro, Sunday (May 28).

Spectators are invited to attend games, all starting at 8:15 p.m.

Reliability Article Will Appear in May

An article on "Reliability," authored by Don S. Clark of San Diego educational services will appear in the May issue of Aztec Engineer, engineering publication of San Diego State College.

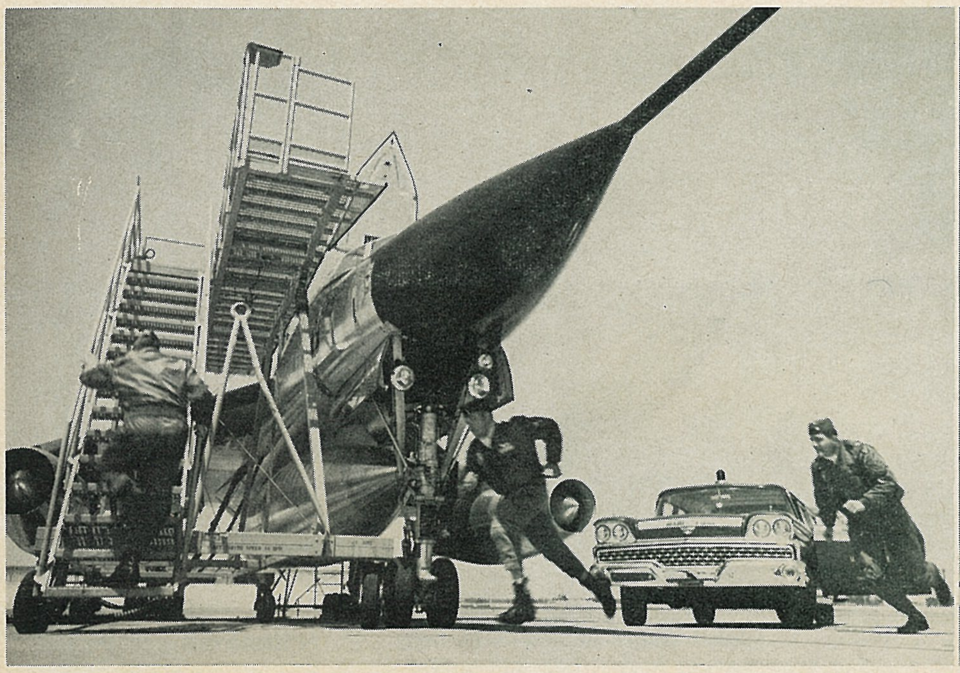
Clark, supervisor of professional and technical development at SD, outlines the young engineer's responsibility in maintaining the quality of a company's product.

CONVAIR COUPLE MARRY IN VEGAS

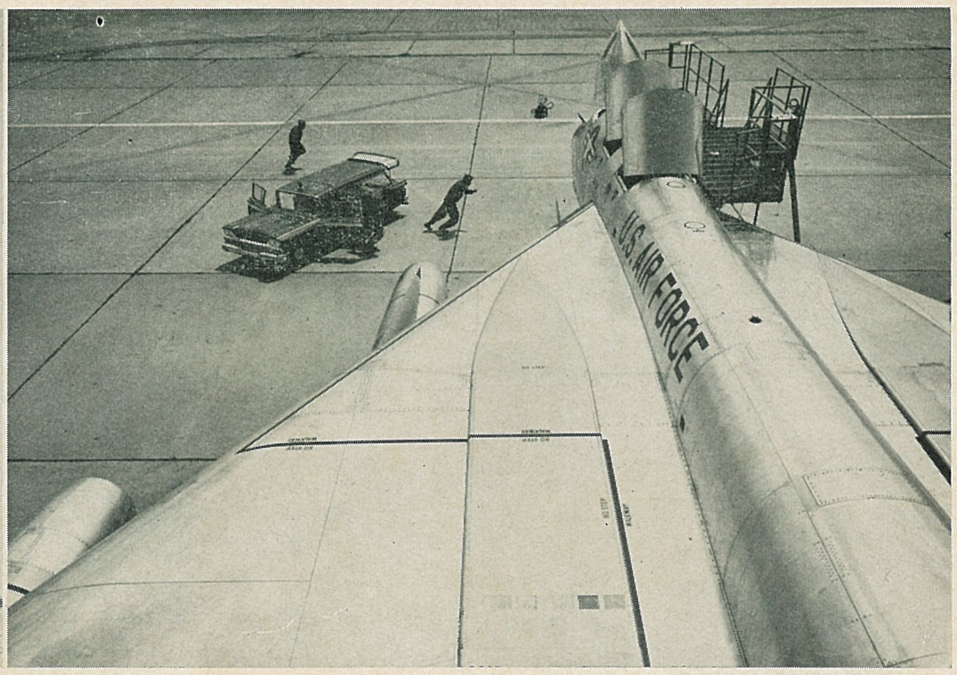
A well-known Convair San Diego couple, Merkel H. Duke of Dept. 188, and Warren E. Newton of SD educational services, were married last Saturday (May 6) in Las Vegas. They are making their home in San Diego.



ASSIGNED TO GD/E—Joseph Franca, most recent graduate under the San Diego apprenticeship program, goes to General Dynamics/Electronics as jig and fixture builder. Presenting journeyman certificate is H. E. Robinson, GD/E tooling general supervisor.



SCRAMBLE—B-58 combat crews of 43rd Bomb Wing are learning how to pare precious seconds from takeoff time. Klaxon warning sends typical three-man crew dashing from alert shack to "cocked" Hustler via alert car, then to battle stations.



Minutes later, Hustler roars aloft for Mach 2 dash to strategic "enemy" targets. Hustler crewmen easily chalked up best scramble time in 1960 SAC Combat Competition.

Hustler No. 54 Accepted After Single AF Flight

B-58 No. 54 recently became the first Hustler to be accepted for SAC's arsenal on its initial Air Force acceptance flight—and certificates of merit have gone to men who played key roles in the event.

Factory Manager Jimmy Harwell presented congratulatory certificates to Maj. J. B. Thompson, chief of Air Force flight acceptance at Convair, and W. H. Tidwell, assistant factory manager.

Thompson piloted No. 54 on its 3-hour, 40-minute acceptance sortie, with a crew of Maj. A. Z. Doka, second station, and M/Sgt. F. E. Pulley, third station.

Signatures of L. R. Hall, Air Force plant representative; Frank W. Davis, Convair vice president and FW manager; and Dick Johnson, manager of flight, appeared on the certificate.

Harwell said a different plaque was being designed for maintenance people who played a "major role" in the feat.

Making Convair advance flights were Val Prahl and Fred Voorhees, pilots; Fred Hughes and Jack Denton, second station, and Jim Lucas and Norman C. Stranberg, third station.

ASTRO MEN SPEAK AT BIOMEDIC MEET

Four Convair men held key roles at a Symposium on Biomedical Engineering held at El Cortez Hotel.

It was sponsored by the San Diego Naval Hospital, the American Institute of Electrical Engineers and the Institute of Radio Engineers.

George Mealey, who heads Astronautics' electronics research group, delivered the keynote address. John McLeod, Astro design specialist, presented his "MAC" extra-corporeal perfusion device and spoke on it. McLeod also chaired a session on "Biomedical Engineering—Today and Tomorrow."

Cyril Nute of Astro appeared in the special techniques portion of the program, while Orlo Meyers of Convair's scientific research office spoke in the bionics portion of the program.

F-102s in Japan Top Safety List

A Japan-based F-102 squadron has garnered the annual Pacific Air Command AF annual flying safety trophy for last year.

The 4th Fighter-Interceptor Squadron at Misawa, Japan, was rated at the top of 10 PACAF units competing for the award. It gained top spot on the strength of its 5,000-hour accident-free flying record during the year which saw the 4th converted to Convair jet interceptors.

Gen. Emmett O'Donnell Jr., Pacific Air Forces commander, in congratulating the squadron, said, "Such a safety record is enviable in itself, and when it is considered that an aircraft conversion was accomplished while meeting alert schedules, this record becomes outstanding."

A. C. Shedrick and H. R. Beckwith, Convair SD field service reps based at Misawa, report that the squadron earned a three-day weekend in March for exceeding the allotted flying time in F-102s and TF-102s.

August C. Esenwein Resigns on Coast

August C. Esenwein, former division manager at Fort Worth and since Jan. 15, 1959, executive vice president at San Diego, resigned last week.

He was quoted as saying that he had no immediate plans for the future. C. Rhoades MacBride, executive vice president of General Dynamics, expressed personal regret.

ATLAS AIR ESCORT 'CAPTURES' BANDITS

FORBES AFB—Two Kansas burglary suspects were captured recently, thanks to a helicopter flying "herd" on a convoy en route to an Atlas missile launch site near here.

Maj. Don O'Toole, Air National Guard pilot, overheard a radio broadcast on the fugitives, noted a car meeting the description of their auto and radioed the information. Astro's Warren C. Weir, convoy commander, halted the convoy while one of his escorting Highway Patrol cars, accompanied by the helicopter, intercepted the suspects.

880-Ms and 990s Flying Daily From San Diego

(Continued from Page 1)

Flight testing of 990 No. 1 is continuing to progress since incorporation of a pod and pylon modification.

Up to last Friday the ship had made nine flights since the modification and reached its maximum operational speed of Mach .91 with entirely satisfactory flight characteristics.

It has been flown with a variety of fuel loadings including full fuel in its aerodynamic antishock bodies at maximum high gross weight speed limits of Mach .79 at 20,000 feet and 375 knots indicated air speed at 15,000 feet.

In addition, the 990 No. 1 in flight test has passed the first in a series of demonstrations designed to increase its maximum permissible landing weight.

On April 25 ship No. 1 was landed at Edwards Air Force Base at a weight of 192,000 pounds, 12,000 pounds heavier than the 180,000 pounds specified for the airplane.

According to San Diego engineers the structure is adequate for even heavier landing weights and they plan to demonstrate these higher weights and obtain FAA certification for their use by airlines. This will permit more flexible medium range operations—a longer series of short-stage lengths without refueling.

★ ★ ★

Reliability Showing Improvement During 880-M and 990 Flight Test

Flight test performance of 880-M and 900 jet transports is demonstrating that reliability improvement activities are proving effective.

In the reliability program every component removed because of suspected or verified malfunction has been subjected to analysis to determine the cause of failure and need for corrective action.

"Purpose of the program is to make all possible improvements so that when airplanes go into airline service the number of mechanical delays will be substantially slashed below the industry average," said W. R. Monroe, SD manager of reliability.

Thus far, according to R. V. Shields, reliability project engineer, 51 per cent of the items have resulted in or were resolved by design changes; 24 per cent have resulted in quality control action in-plant or at the vendor plants; 13 per cent have resulted in vendor redesign; 12 per cent of the failures could not be verified by retest or the cause of failure could not be determined.

The system works as follows:

Failure review teams document every component failure on a trouble report form.

The failed part is expedited through necessary material control and part accountability procedures.

The failure is verified by visual inspection or expedited functional retest by inspection personnel.

Failed component and substantiating data is reviewed by design engineers and a course for further action is decided by the failure review team.

After cause of failure has been determined corrective action is obtained through design change, quality control improvement, or vendor redesign.

Shields pointed out that success of the program to date has been due to personnel of all areas realizing its vital importance and working together.

He said sections making substantial contributions to the program were quality control (quality assurance section, receiving inspection environmental test group, outside production inspection, in-plant and flight line inspection); material department (purchasing, manufacturing control); manufacturing (field operations); engineering (design group, engineering test laboratories).

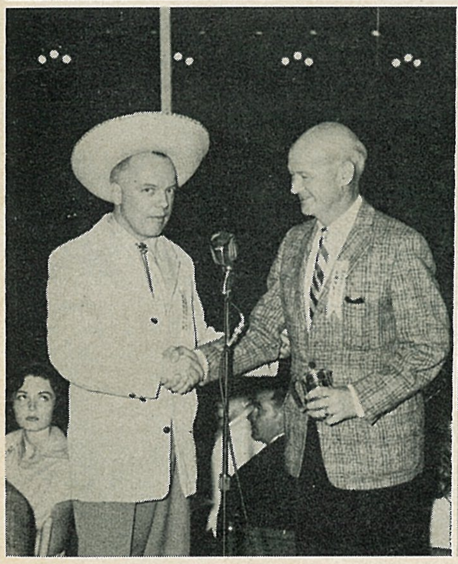
Dynamics Creates Five New Divisions In Reorganization

(Continued from Page 1)

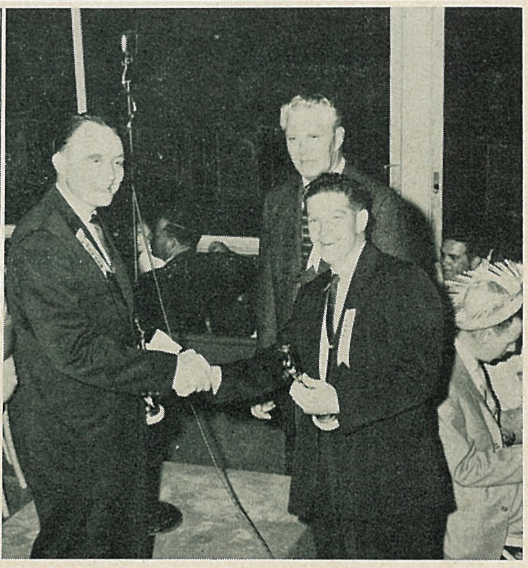
tions, will be responsible for the five new divisions and General Atomic Division, producer of nuclear reactors. His headquarters will be in San Diego.

W. P. Gullander, formerly executive vice president-finance and administration, will be responsible for the group which includes Canadair Ltd., Electric Boat Division, Electro Dynamic Division, General Aircraft and Leasing Division, General Dynamics/Electronics, Liquid Carbonic Division and Material Service Division. His headquarters will be in New York.

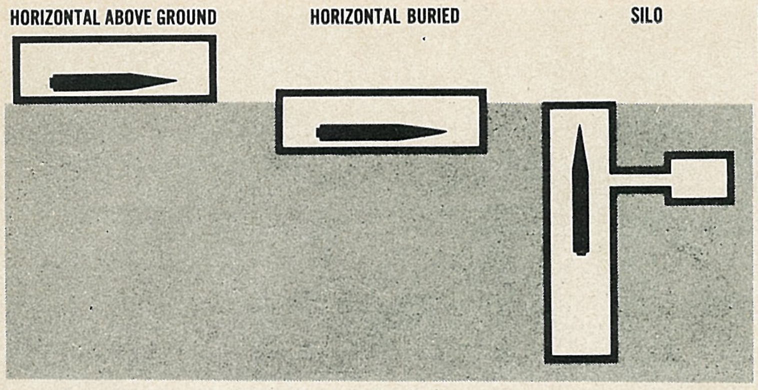
General Dynamics Corporation is the nation's top defense contractor producing submarines, aircraft, missiles and space vehicles and electronic equipment. In addition it serves wide industrial and commercial markets.

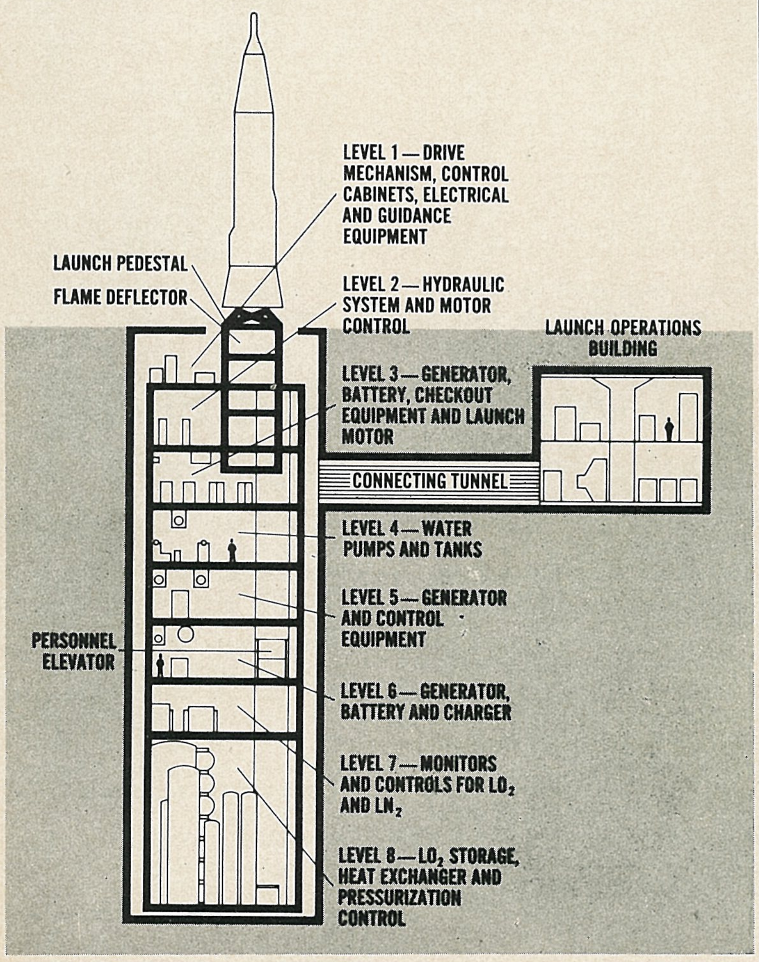






DOWN MEXICO WAY—Some 750 members and wives of San Diego Management Club attended "Day at Races" April 22 at Caliente. They enjoyed filet dinner, Mexican music and dog races. Center photo shows part of Convair crowd in clubhouse. In photo at left W. W. Fox (with hat) gives club's Mug of Month award to Tom Chadwick. In photo at right J. J. Ireland (left) gives M. F. Link (Dept. 119) MacSave-it trophy for February. In background is L. G. Lawson, club president. D. R. Wilson (Dept. 129), not shown, received MacSave-it award for March. Through Cost Improvement Proposals Link and Wilson have saved nearly $40,000.





Astro Turns to 'E' and 'F' Sites As Work Finished at 'D' Bases

"Sell-off" late last month of three Atlas launch complexes, plus supporting facilities, at Offutt AFB, Neb., wound up Astronautics activation activities at Series "D" Atlas operational bases.

Attention now focuses on activation of Series "E" and "F" bases.

Activation work is broken into three broad groups designated by the Atlas missile series (D, E and F) and related equipment installed at the Air Force bases.

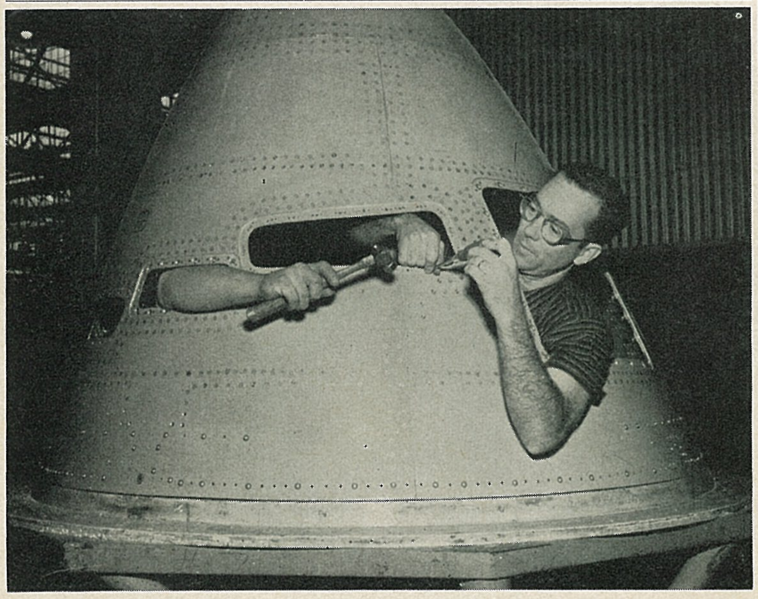
Here, in brief, are the basic differences.

SERIES "D." Called "soft" sites, missiles are stored in horizontal above ground facilities. Guidance is radio-inertial (ground station). Several launch pads are served by each launch control center (above ground). Missile thrust is approximately 360,000 pounds. Such facilities are located at Vandenberg AFB, Calif., Warren AFB, Wyo., (Warren I and II) and Offutt AFB, Neb.

SERIES "E." Called "semi-hard" sites, missiles are stored in horizontal position with only upper surface exposed. Guidance is all-inertial (no ground station). Each launch pad has launch control center (below ground). Missile thrust is approximately 390,000 pounds. Launch facilities are being installed at Warren AFB, Wyo. (Warren III), Fairchild AFB, Wash., and Forbes AFB, Kan.

(Both series "D" and "E" launch sites are inevitably referred to as "coffin" sites.)

SERIES "F." Called "hard" or "silo" sites, missiles are stored in vertical position completely below ground. Guidance is all-inertial (no ground station). Each launch site has a launch control center, also below ground. Missile thrust is approximately 390,000 pounds. Launch facilities are being installed at Schilling AFB, Kan., Lincoln AFB, Neb., Altus AFB, Okla., Dyess AFB, Tex., Walker AFB, N.M., and Plattsburgh AFB, N.Y.



NOT REALLY!—Three hands are necessary to put finishing touches on metal nose cone for 990 jet transport. Only flight test 990s get metal nose to house flight instrumentation; production versions are plastic and shield weather radar equipment. Head and two arms belong to W. D. Donner; third arm belongs to Phillip Pate, both SD Dept. 31.

Retired Folk Get ID Cards

Issuance of Convair "retired employee identification cards" has resulted in considerable correspondence to employee services at SD in appreciation.

The laminated cards carry the individual's photo, birth date and Convair retirement date and on the reverse side is the CRA life membership card. It is honored at the SD salvage yard and at all CRA sites, such as Pecan Park and Gillespie Field.

Excerpts from some of the letters follow:

"Thanks for the card . . . I worked for 50 years and of all the companies Convair was the most fair to its workers."

Charles E. Nelson.

* * *

"A few days ago I was wishing that I could visit the salvage yard and pick up a few items to use in the repair work I do sometimes, and lo and behold along comes this card . . . Thanks so much."

W. C. Gilchrist.

* * *

"Thanks very much for the CRA and ID card, which I will keep with me always. I sure enjoyed all the time I worked at Convair and have many pleasant memories."

Ira Lee Balsley.

* * *

"Thank you a million for a fine surprise. You sent me **Convairiety** and it makes me feel I'm still with Convair, a fine company with many fine people."

Milo T. Radovich.

* * *

"The retired employee card just received, reminds me of the very generous Convair policies in personal dealings with employees . . . The privilege of the salvage yard makes the card of great value to me."

Earle G. Henry.

* * *

"I have wished for such a card for some time . . ."

Phil R. Dietz.

* * *

"Thanks. It will be good to have."

A. T. Furnas.

* * *

Convairiety is a welcome item in my mail . . . and the ID card shows that Convair hasn't forgotten us."

Joseph Ray Bocan.

* * *

"Thank you and Convair very much for the card . . . I think of you all often."

Merrill Gillespie.

* * *

"Thank you very much for the card. I was wishing for one."

A. A. Diebold.

* * *

"Very glad to get the new ID card. I was wondering if I could get one."

George C. Allen.

* * *

"The card is a wonderful idea."

John G. Goldmann.

INSTRUMENTATION SYMPOSIUM HELD

Convair FW and Astronautics engineers held important posts in a recent aerospace instrumentation symposium in Dallas, April 30 through May 4.

Six Convair FW engineers served as chairmen of various phases of the conclave. L. J. Mertz served as general chairman of the symposium. In workshop sessions, E. W. Bradford, senior nuclear engineer, was chairman of the section on "Transducers in Radiation Environment." G. F. Main, structures group engineer, headed the section on "Defining the Instrumentation Requirements, Data Reduction and Recording Techniques for Airloads Program."

Two Astro engineers, R. L. Galley and H. N. Norton, presided at committee sessions on ISA flow and transducers for aerospace testing.

L. Gray, FW editor CFF CFAE handbook, headed a workshop on "Flow Measurements—Mass and Volume."



ALAMO "DEFENSE"—F-102s attached to 182nd FIS, Air National Guard squadron at Kelly AFB, Texas, wing over replica of famous Alamo, built for current movie, during shooting of ANG film depicting role of Convair-built interceptors in country's defense. Convair SD reps assigned to base are Bill Lightfoot, Joe Gallant, and Cliff Harrell.—ANG photo.

System of 'Audio Inventory' Undergoes Trial Run at FW

Material department may soon use "audio inventory" to keep tabs on some 90,000 items.

A trial run is planned on a limited scale to test out the new counting system, which would eventually reduce cost of inventory by nearly 70 per cent.

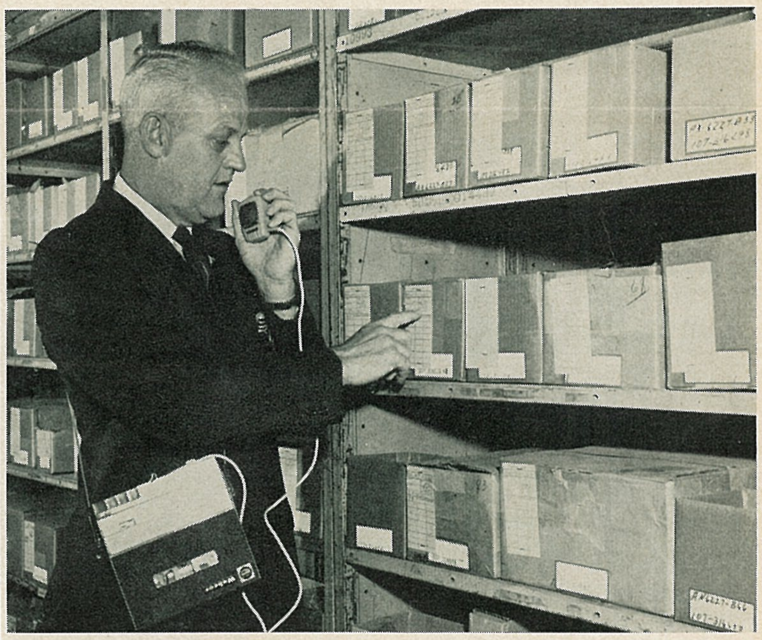
Stock clerks now transcribe the amount of stock from a pre-count form to another tab card, which must then be resequenced in tabulating. This information then passes back and forth through a number of check points.

New method calls for a stock clerk to read the location of the item, material number and quantity into a portable tape recorder. Tapes are then forwarded to tabulating, where dictated information will be punched on an IBM card.

All told, the audio inventory would eliminate about seven steps now used to inventory 37 different groups of material.

P. J. Quinlivan, Dept. 87, said the audio inventory project was introduced at Convair FW's seventh value engineer seminar.

A team of Quinlivan, W. F. Herron, Dept. 4; J. R. Morris, Dept. 8; J. W. Doggett, Dept. 4; and L. D. Weedon, Dept. 87, comprised the project team.



AUDIO-COUNT—P. J. Quinlivan, Dept. 87, demonstrates how miniature recorder will be used in taking annual inventory. It's a trial run.

'Simple' Idea on Air Freight Use Brings $2,301 San Diego Saving

Staying abreast of new services outside of Convair can save Convair money.

This reasoning is enabling O. G. McGuire, motion picture editor in Dept. 98-8, to save San Diego operating division $2,301 and at the same time earn for himself $230 in Employee Suggestion cash.

McGuire suggested that unclassified color film, which is sent to Los Angeles for processing, be shipped via special "Air Freight," which is a relatively new service.

Previously, film was sent registered first class mail at a flat fee of 64 cents a pound. Via "Air Freight," up to 70 pounds can be sent at a minimum fee of $4, plus a $1.75 charge for delivery from the airport.

In other words, it would cost the same ($5.75) to send nine pounds of first class mail as 69 pounds "Air Freight." Because of the number of prints involved the weight factor is even more important on the return shipment from Los Angeles.

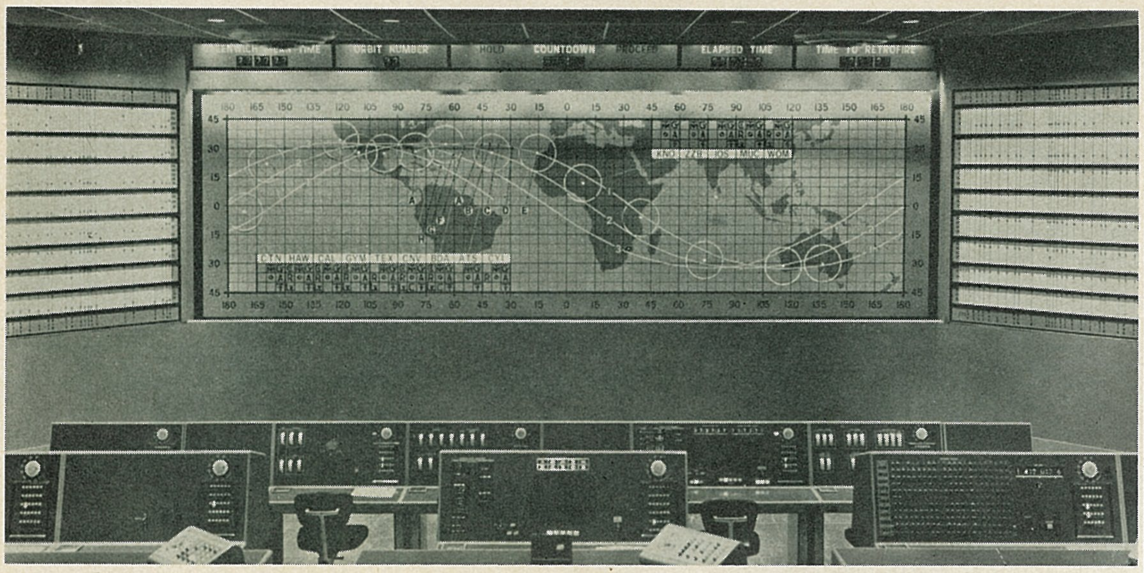
In addition to cheaper rates, intangible savings are involved because the new method is faster. In many instances processed film is needed as soon as possible so that it can be analyzed before tests are allowed to continue.

SERIES OF BROCHURES WINS FIRST AWARD

Announcement was made last week that Kragh Lillethorup of Convair Pomona's publications art group received "First Award" for his entry in the eighth annual Technical Illustrators Management Association exhibit in Los Angeles, Calif.

The winner was a series of six brochures designed and executed by Lillethorup for the 1960 WESCON show at Los Angeles. Other Convair Pomona entries were submitted by Larry Weeks, Ed Ramstead, Don Halstead, Jim Perry and Paul McGannon.

The TIMA exhibit opened April 19 and will continue through May 28 at the California State Museum of Science and Industry.



FOR MAN IN ORBIT—Control display system for Project Mercury control center at Cape Canaveral was designed and built by General Dynamics/Electronics at San Diego, Calif. Data flows in from 18 worldwide data stations.

John Thurston New President Of Liquid Carbonic Division

Appointment of two executives to key General Dynamics positions has been announced.

John F. Thurston, former head of Electro Dynamic and more recently vice president-special projects for the corporation, has been named a senior vice president and president of Liquid Carbonic Division. He succeeds Rex L. Nicholson, who has resigned to devote himself to other business interests.

William T. Lake, controller for Curtiss-Wright Corporation, has been named General Dynamics comptroller.

Thurston joined the corporation in 1955 as general manager of Electro Dynamic and became a corporate vice president and member of the board of management in 1957. He became vice president-special projects in 1960.

Previously, Thurston had been merchandising manager of the Replacement Division of Thompson Products, Inc., in Cleveland.

Lake had been controller of Curtiss-Wright since 1953. Previously he had served with Keystone Portland Cement in Philadelphia, Burlington Industries and the Ford Motor Company. He was a Navy commander in World War II.

★ ★ ★

A shipyard test worker has become the second Electric Boat employee in history to win the maximum award authorized under the division's suggestion program. His idea will facilitate testing of the 16 missile tubes in Polaris-firing submarines.

★ ★ ★

A General Atomic TRIGA Mark-F "pulsing" reactor will be installed by the Norair Division of Northrop Corporation to simulate radiation conditions that might be encountered by advanced space vehicles, their crews and equipment. The reactor, capable of producing controlled split-second pulses of intense nuclear radiation, will be the central facility at Northrop's new Space Radiation Laboratory at Hawthorne, Calif. It will be operational in late 1961 or early 1962.

A TRIGA may soon be acquired by the government of Yugoslavia. The International Atomic Energy Agency has approved a Yugoslav request for assistance in acquiring a TRIGA and the uranium fuel for its operation.

A 14-year old New Rochelle, N. Y., submarine enthusiast will be the guest of Electric Boat at the launching of the Polaris-firing Thomas A. Edison June 15.

Charles McCoy was personally invited to the launching by Carleton Shugg, Electric Boat president, after he had written offering to work at the Groton, Conn., shipyard without pay this summer "just to be around submarines."

Connecticut law prohibits hiring a youth under 18.

★ ★ ★

George W. Codrington, 74, a director of Electric Boat and, later, General Dynamics from 1937 to 1957, died April 25 at his home in Daytona Beach, Fla. He had also been a vice president of General Moters.

★ ★ ★

The USS Kitty Hawk, world's largest aircraft carrier and first of the missile age carriers, depends solely on two rapid-firing Advanced Terrier missile batteries for its surface-to-air defense.

The Kitty Hawk went into commission April 29 at the Philadelphia Naval Shipyard.

The Advanced Terrier missiles, built by Convair-Pomona, replace the eight conventional 5-inch dual-purpose guns normally carried on the Forrestal class carriers.

★ ★ ★

Construction began last month on the nuclear-powered submarine Flasher at Electric Boat Division.

★ ★ ★

A contract for dial telephone exchanges for nine U.S. military establishments in the Philippine Islands has been awarded to the Telecommunication Division of General Dynamics/Electronics.

The contract was awarded by the U.S. Army Signal Supply Agency. It calls for "XY" dial switchboards and auxiliary equipment for a total of 4,200 lines, divided among the nine different installations.

★ ★ ★

Electric Boat Division has received a definitive contract for two submarines with a total maximum price of $76,200,000. The contract provides for future conversion to an incentive-type contract.

Prices do not include propulsion machinery, electronic equipment, weapon systems and other similar equipment.

★ ★ ★

An advanced C-band beacon transponder which greatly increases the reliability of radar tracking systems has been developed by the Military Products Division of General Dynamics/Electronics.

Designed as a tracking aid for missile and high speed aircraft applications, the transponder (Model SC-702) operates in the 5400-5900 megacycle frequency band, and responds to coded interrogations from radars such as the AN/FPS-16 and the AN/MPS-26. It can decode 38 different codes.

Every Day 880s Add 182 Hrs. to Air Time

Convair 880s have piled up well over 26,000 hours flying time since the first was delivered to a customer airline early last year.

Up to April 20 the 27 Convair jet transports then in service with TWA, Delta, and Northeast airlines had flown exactly 26,469.48 hours. Each day they were adding 182 hours in the air on scheduled passenger runs, exclusive of the 25 hours scheduled for TWA pilot training flights.

'Suggester of Month' Program Proposed With Lunch, Trophy

A new plan by which a "Suggester of the Month" will be named, awarded a trophy and honored at luncheon in the executive dining room is under way at Fort Worth.

Duplicate trophies will be awarded monthly winners in both salaried and hourly classifications, according to M. J. Scott, supervisor of the suggestions section.

"Suggester of the Month" will be the employee in each category whose installed suggestion is the one saving the company the greatest amount of money in the previous month.

Each winner will have permanent possession of the trophy awarded him. Artists are now working on a design for the trophies, which will include the General Dynamics emblem.

Awards will be made at monthly luncheons in the executive dining room, when guests will include the winner's department head and other top management representatives.

Dynamics to Help CAP Cadet Scholars

Two annual General Dynamics Corporation scholarships for Civil Air Patrol cadets in engineering or allied sciences have gone this year to a cadet from Nebraska and one from Texas.

Winners of the four-year grants are Thomas C. Kuffel of Omaha, Neb., and Walter L. Mundell, Kilgore, Texas. Amounts are based on individual needs.

Kuffel will major in mathematics and physics at California Institute of Technology. Mundell will major in physics at Southern Methodist University, Texas.

B-58 Makes Flight In Polar Latitudes

A B-58 from Carswell AFB recently completed an "excellent" 12-hour, 45-minute sortie over polar latitudes.

Purpose of the flight was to evaluate operation of search and doppler radar and the automatic bomb-nav system at high geographic latitudes.

Crew consisted of Col. J. K. Johnson, 43rd Bomb Wing commander, pilot; Capt. W. L. Polhemus, navigator; and Capt. R. R. Wagener, DSO.

B-58, TF-102 Slated For Public Display

A Convair-built B-58 and TF-102 will be among SAC mainstays on static display during open house at Carswell AFB May 20.

The public is invited to attend the Armed Forces Day celebration from 8 a.m. to 4 p.m.

Also tentatively slated for static display are a B-47, B-52, T-33, C-47, C-123B, and likely other SAC aircraft.

Air National Guard and Air Reserve units in the area are expected to make flybys.

Delta Earnings Jump; Jets Held Responsible

"Jet leadership on major routes" is the first reason given by Delta Air Lines for increased earnings during the nine-month period ending March 31, according to an announcement by C. E. Woolman, president and general manager.

Delta, which operates nine Convair 880s and has three more scheduled for delivery this fall, reported net income after taxes of $3,042,000—equal to $2.71 per share—for the nine-month period. This compares with $1,103,000, equivalent to $0.98 per share, for the corresponding period of the previous fiscal year.

Jet 880s in passenger service with Delta started flying airline routes on May 15, 1960.

During the nine-month period, Woolman said total operating revenues rose to $105,920,000, an increase of 24 per cent over the $85,757,000 for the previous period. Operating expenses were $98,462,000, up 18 per cent.

Delta carried 2,621,125 passengers during the nine months, a 12 per cent increase over 1960. Woolman also reported a gain in passenger revenue, $97,678,000, compared with $78,120,000.

During the third quarter of the fiscal period Delta set a three-month traffic record of 932,962 passengers and established an all-time monthly high of 335,977 passengers in March.

From the aspect of revenue passenger miles also, March was a record month. The Atlanta-based carrier surpassed the 200 million mark for the first time, flying 200,174,129 revenue passenger miles.

Passenger load factor — the percentage of seats filled — increased from 56.10 to 59.02.

B-24s Transferred to England To Support Normandy Landing

(This is the 59th installment in Convairiety's continuing history of Convair and Convair aircraft.)

After the Allies seized the southern end of the Italian peninsula and knocked Mussolini's government out of the war, the 9th AF was transferred to England in the fall of 1943 to become a tactical outfit in support of the forthcoming Normandy invasion. Strategic bombing from the Mediterranean theater was assigned to a new organization, the 15th AF, formally activated Nov. 1. Under command of Maj. Gen. Nathan F. Twining after January, the 15th's heavies were to hammer the Axis from the south while Doolittle's bombers struck from the United Kingdom.

Manduria, on the Italian "heel," became the initial Liberator base, two groups from the 47th Wing shifting there from Africa late in the year. By mid-January 1944 six additional groups, each composed of 62 B-24Hs, had arrived from the States. Additionally, the 15th was allocated 739 B-24s (with 937 crews) and 200 B-17s (178 crews) through February. Monthly allotments of 171 Liberators and 60 Fortresses were scheduled thereafter.

The 15th's first heavy strike was staged Nov. 2 against the Me-109 complexes at Wierner-Neustadt, Regensburg, and Leipzig when 112 B-24s and B-17s dropped 327 tons of bombs with widespread damage. It was estimated the raid reduced German single-engine fighter production by 30 per cent for four months. The attacking force claimed 56 enemy fighters destroyed, at a loss of 11 bombers.

It was not only the mass attacks that paid off. On Jan. 19, 1944, the 449th Group sent 27 B-24s to drop 65 tons of bombs on the German long-range reconnaissance field at Perugia. This raid totally disabled the field for four days and was credited in large measure with the complete tactical surprise achieved by the invasion force that hit the Anzio beaches Jan. 22.

In support of a stalled ground offensive in central Italy, 15th AF Liberators ranged westward that summer, pounding Toulon harbor, rail yards at Miramas and Avignon, airfields at Chanoines and Valence, and gun emplacements around Genoa, Savona, and Marseilles. Returning to the Italian campaign, B-24s concentrated the "tactical" end of their work that fall and winter on transportation targets, notably rail lines in the vicinity of Brenner Pass.

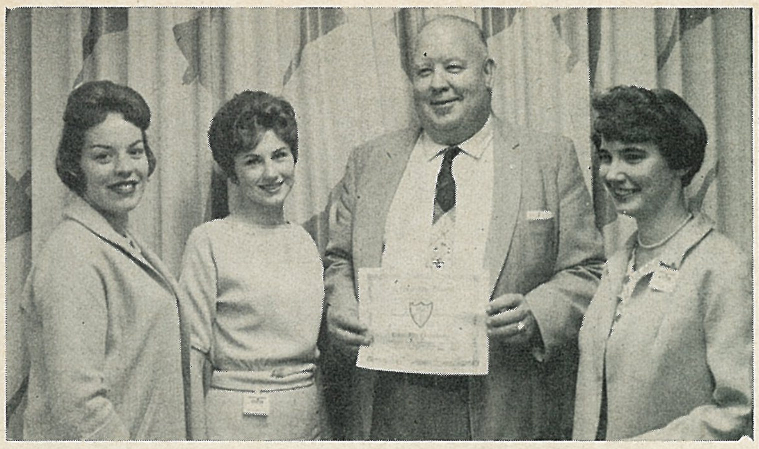
Budget Executives To Speak in Texas

Three Convair executives have key roles on the program of the 11th annual conference of the National Society for Business Budgeting May 25-26 in the Statler-Hilton Hotel in Dallas.

Dan Watters, Convair-Fort Worth manager of budgets, will be a panelist for a discussion on "Automated Budgeting." Two Convair Astronautics representatives will help lead a discussion on "Budget requirements relating to defense industries and government contracts." They are John B. Morgan, chief of off-site accounting, who will serve as panel chairman, and Howard E. Lee, budgets chief.



ITALIAN LESSON—Crew members of B-24 Liberator of 15th Air Force in Italy brush up on language, with help of diminutive instructor.



TOP SCHOLARS—Convair daughters winning Antelope Valley Management Assn. scholarships for 1961 are (from left) Macine Ziccardi, second; Mary Schmeer, third; Walt Austin, club president presenting awards; and Luise Lounsbury, first-place winner.

Three Convair AV Daughters Win Management Scholarships

ANTELOPE VALLEY—Three girls, daughters of Convair employees at Antelope Valley facilities, received 1961 scholarship awards given by Antelope Valley Management Association.

Luise Lounsbury, daughter of Robert Lounsbury of MSTS Dept. 575-3, received top cash prize of $300. Placing second was Macine Ziccardi, whose mother, Eunice, recently was transferred from Palmdale facility to Dept. 197-2 at Convair SD. She received a $100 U.S. Savings Bond. Mary Schmeer, daughter of Oscar H. Schmeer of Dept. 325-1 at Palmdale, received third award, a $50 U.S. Savings Bond.

Presentation was made at the May 5 Management Club meeting at AV Country Club.

The girls, all seniors at Antelope Joint Union High School, were conducted on a tour of Convair facilities at MSTS and Palmdale April 27 with Walt Austin (Dept. 325), club president, acting as host.



FLAPPER ERA—Four Convair employees take part in Roaring 20s number in "Going, Going, Gone." They are Victoria Eberly, second from left, and three gentlemen at right, Ed Moores, Joe Kraynak and Stan Medford.

Rehearsals Progress For Musical Review

Final rehearsals are now in progress for "Going, Going, Gone," a musical review to be staged by Rhythm Aire Players at Pacific Beach Women's Club, 1721 Hornblend, May 19 and 20 at 8 p.m.

The show features Robert Brisbin, Convair SD Dept. 192-0, who also directs the production. Other Convair folk in the cast include Victoria Eberly, SD Dept. 34-1, and Astro employees Ed Moores, Dept. 833-5; Joe Kraynak, Dept. 833-1, and Stan Medford, Dept. 250-2.

"Going, Going, Gone" will include elaborately staged productions based on Gay 90s, Roaring 20s and current Broadway hits. Tickets are available from Medford at Astro ext. 1010.

EAGLES FLY HIGH IN SWING LEAGUE

Convair SD's Eagles flew into first place by a narrow one-game margin last month to win the championship of the Industrial Swing Bowling League.

The SD squad bested teams from Solar, Ryan, Rohr and Astro in the tough 855 scratch competition. Two other Convair SD teams were entered in the league. Experimental placed second while the Jets were farther down in the standings.

The Eagles were captained by R. A. Zwolinski (Dept. 401). Team members were Herb Ruth (Dept. 192), Rick Schumaker (Dept. 160), John Dravland (Dept. 401) and Art Pegas (Dept. 192). Dravland rolled the league's high series—684.

Saturday Schedule For Salvage Yards

Coming Saturday schedule for employee shopping days at Convair San Diego and Astro salvage yards is:

SD—May 13 and 27.

Astro—May 20 and June. 3.

Charm School Seen For Astro Teen-Agers

Special sessions for teen-agers are on the agenda as Astro CRA Women's Activities Council continues its series of charm school classes for women.

Nine weeks of instruction in such subjects as make-up, skin care, wardrobe, voice, etiquette and hair styling will be offered girls 12 through 17. Sherry Miller, who has conducted recent classes for adult employees and dependents, also will teach the teen-ager sessions.

Total cost of the series of nine weekly two-hour classes is $25. Participants will be divided by age group with personalized sessions for those 12-14 and 15-17. Each class will be limited to 12 students.

Prospective teen-age students have been asked to call Elaine, ext. 1111, to register.

'Charger Highlights' Movie to be Shown

Astronautics CRA has arranged to show the film, "Charger Highlights of 1960," for the benefit of employees.

Two showings daily at 4 and 5:15 p.m. will be held on May 15, 17, 22 and 24 in the main plant cafeteria. Employees who have finished their regular work shift may attend free of charge.

District Meeting For Toastmasters Slated Saturday

Convair Toastmasters — 24 strong—will attend the District Conference en masse this Saturday (May 13) at the San Diego Club, 1250 Sixth St.

The regular Monday meeting of the Convair group will be cancelled for the night of May 15, with the conference session substituted for that week's meeting.

Registration for the District Conference which includes the 44 clubs and 1,200 members in San Diego and Imperial Counties starts at 10 a.m.

During the morning's educational program, Ken Samples (Dept. 6), president of the Convair group, will give a 10-minute talk on benefits derived from holding an office in the Toastmaster organization.

Winners of the area speech contest will compete in the "serious" speech competition at the noon luncheon, and in the "humorous" category at the 7 p.m. dinner.

Reservations for the meals will be made at time of registration. Luncheon price is $2.25; dinner, $3.50.

SOUVENIR COINS DISCUSSION TOPIC AT MAY MEETING

"So-called half-dollars," treasured by coin collectors for their interest and rarity, will be the subject of a slide show and discussion at the Convair SD Coin Club meeting Thursday (May 18).

Paul Hamm (Dept. 190) will be guest speaker at the 7:30 p.m. gathering in the Convair cafeteria executive dining room. He will show slides and explain his collection of the souvenir coins, same size as U.S. minted half-dollars, but of no monetary value. They are given out on special occasions for trade, advertising, or souvenir pieces.

All members are reminded to bring foreign coins or medals and decorations to display during the evening, said Al Baber, club president. Prizes will be given for winning entries in the second quarterly exhibit.

A coin auction and door prize drawing are also included in the evening's program.

Astro Leads Golf Match Play Event

Tight rankings developed as a result of the first round of Convair inter-division golf matches held April 29 at Riverside's El Rivino Country Club.

Astronautics, with 77 points, came in first; Convair San Diego was second with 73 points and Pomona was still in contention with a 66-point total.

Second round of the match play competition will be held July 22.

Astro Travelers To Visit Fallbrook

Astro Travelers will converge on Live Oaks County Park near Fallbrook May 12, 13 and 14 for their monthly outing.

The April meeting featured an anniversary (second) trip to Ocotillo, scene of the group's first trip over two years ago.

SD-Astro Archers Taking Aim At State, Regional Bow Meets

Convair bowmen have a busy month ahead as they prepare for competition in state and regional meets as well as their own CRA shoot coming up this Sunday (May 14).

SD and Astro archers will be "aiming" at hams during the Sunday open shoot at Balboa Park field range. Registration will be taken from 8 to 9:15 a.m. Shooting will start at 9:30 a.m.

"We are looking for a larger turnout at the May shoot than we had at the April event when 60 took part," said Al Phipps, club president. "Everyone is invited to try their skill with winners to take home canned hams as prizes."

At least 12 Convair archers will enter the sectional shoot at Griffith Park, Los Angeles, May 20-21, and the state shoot in Oakland, June 3-4. Several SD and Astro bowmen competed in the regional shoot in San Diego May 7. All meets are sponsored by the California Bowmen Hunters and Field Archers Association.

Next meeting of the Convair Archery Club is set for Thursday (May 18) at 7:30 p.m. in the CRA Clubhouse, Pacific Hwy.

SUMMER DANCING CLASS CONSIDERED

Tentative plans are being made at Astronautics for a series of summer ballroom dancing classes under sponsorship of CRA.

Advance plans call for an intermediate class for those who have had previous instruction to be held on Wednesday night. A new beginner's class is slated for Monday night. Both couples and singles will be accepted.

Classes are to be held at Jackson's Clubhouse, Mission Gorge Road and Fairmount from 7:30 until 9:30 p.m. each week. Initial classes would meet May 22 and 24.

Classes would run for a total of 12 weeks. Cost per student for the 24 hours of instruction is to be $9. June Shuford, veteran industrial and Arthur Murray instructor who is conducting current CRA classes, would serve the summer classes.

Employees interested in taking part may register during normal lunch periods by calling at CRA office, Bldg. 8 (cafeteria).

Specific information is available through Bryan Weickersheimmer, CRA commissioner, at ext. 3322.

SD-Astro Fencers Win Two Matches

April was an exceptionally busy month for members of the Convair Fencing Club, composed of both Astronautics and Convair SD employees.

On April 7 an intermediate foil competition was staged at the YWCA. Three local fencing groups took part in addition to the Convair fencers. Dick Jones of Convair SD won the men's bout. Barbara Proppe, an Astro daughter, copped the women's match.

April 8 found the Convair Fencing Club and the San Diego Fencers joining for a social event at the Rhinelander, La Jolla. Vince Surdi was the principal speaker.

On April 17 the Convair group sent representatives to Pomona College, Claremont, for a special meet. Barbara Proppe finished fourth in this event.

Three Teams Tie In SD Volleyball Shop Competition

Standings of Convair SD shop league volleyball were all tied up at end of first round of play with three teams bunched on top of the heap.

Industrial Relations, Electrical, and Astro Data stood neck to neck with 6 wins, 1 loss each.

Dept. 7 was a nose behind with a 4-3 reading; Equipment Installation, 3-4; Untouchables, 2-5; Dept. 188, 1-6. Astro Test trailed the pack with 7 losses.

Although the volleyball league is sponsored as a Convair SD activity, two Astronautics teams, Astro Data and Astro Test, were invited to join to fill out the league, explained Pete Beyrer, CRA commissioner.

Games are played weekly on Wednesday evenings in Muni Gym, Balboa Park.

Gun Club Facility Open Wednesdays

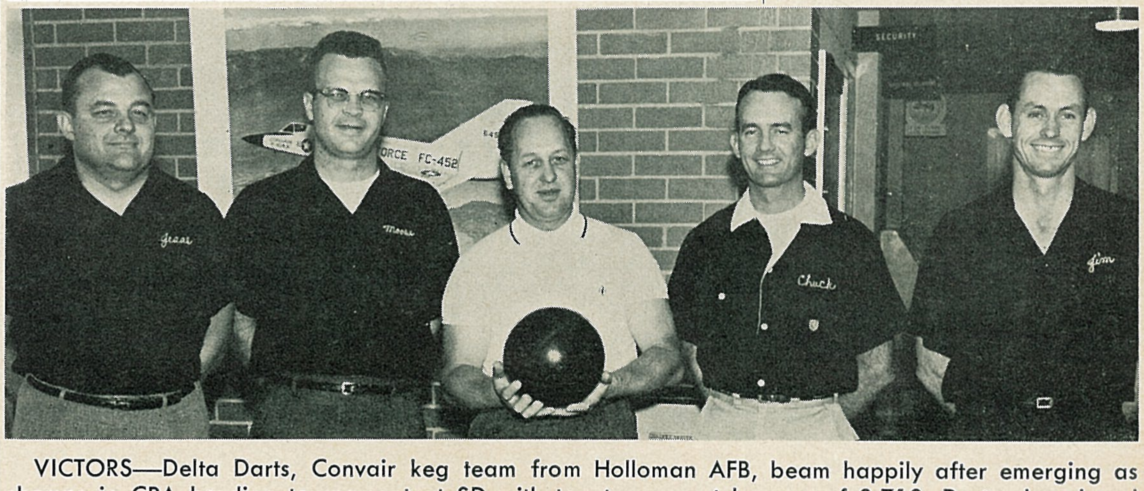
Convair SD and Astro nimrods can practice their shots two days each week at Gillespie Field gun range.

The CRA range now is open every Wednesday evening from 5 p.m. until dusk for trap and skeet shooting, said Jack Swank, CRA commisioner at SD. Open shooting is held each Sunday.

Next organized event for Convair Gun Club members is the registered ATA trap shoot this Sunday (May 14), starting at 9:30 a.m. Members may compete in three classifications — 16-yd., handicap, and doubles. Trophies will go to winners in each event.



CONGRATS—M. C. Terry, Holloman manager of Convair operations, praises Jim Rodgers for rolling high men's scratch score, 656, and all events, 1,821, in SD tourney.



VICTORS—Delta Darts, Convair keg team from Holloman AFB, beam happily after emerging as champs in CRA bowling tournament at SD with top team scratch score of 2,710. Darts also placed second in handicap. From left, team members are George James, Jack Weaver, O. C. Ancel, Charles Penham, James Rodgers.

CRA Sports & Recreation Convairiety

Packed Program Planned For Fish Club Meeting

Monthly fishing contests and the rejuvenated campster building program will be topics of discussion at the May 16 meeting of Convair SD Fishing Club at the CRA Clubhouse, Gillespie Field.

Also attending the meeting will be city sports enthusiasts who will join with club members to honor the retired outdoor editor of the San Diego Union at a 6 p.m. potluck dinner.

Occasion will be a going-away party for newspaperman Tom Carmichael and his wife, Olga, both of whom have been honorary members of the Convair SD Fishing Club. The couple is leaving California and moving to Tennessee.

The potluck will be followed by a short business meeting during which prospective campster builders will be able to obtain latest information concerning the program which is moving on an accelerated schedule.

During the past three weeks nine campsters have been built at the Gillespie facility and names are now being added to the reservation list, according to R. W. Menzie, CRA commissioner.

Also to be discussed at the meeting will be the 1961 rules governing the monthly fishing contests. All Convair SD employees, not only Fishing Club members, are eligible to enter catches in the contests and compete for cash prizes.

Only two prizes were claimed during May. The first award ($15) went to A. J. Pommier (Dept. 188) who entered a 16¼-in. trout. A 14-in. trout entered by Ruth Menzie, wife of the commissioner, took second ($10) prize.



MODEL MODEL—Meet lovely Linda Chandler, Convair SD Camera Club model, who will be entrant in Photorama May 21 in Balboa Park. Photos were made by club photographer Ron Ainsworth (Dept. 144).



Jim Halfacre Hits Club Shoot Sweep At April 23 Match

Jim Halfacre (Dept. 180) was back in stride again as he topped both .22 Police and .22 Short National Courses at the April 23 Convair SD Pistol Club matches.

He took the master class of Police Course with a score of 295, and the Short National with 280.

E. E. Bickar (Dept. 115) and Joe Williamson (Dept. 401-5) placed second and third respectively in the master with 281 and 280.

Ralph Picard (Dept. 6, GD/E) won the expert class with 273, followed one point behind by Bill Dittmann (Dept. 6), 272. Dale Young (Dept. 31) was top sharpshooter, 283; A. B. Carlson (Dept. 68), second, 270. In the marksman class Dean Bowles (Dept. 6), was first, 211; L. L. Richeson (Dept. 129), second, 200.

Trailing Halfacre in the National were Ash Bishop (Dept. 401-5), second, 269; Carlson, third, 268; Williamson, fourth, and Young, fifth, both with 267s.

Road Runners To Visit Park

Road Runners, Convair SD trailer group, are looking toward the tree-covered hills for their next camping location as summertime bursts over the desert.

They have chosen Live Oaks County Park near Fallbrook, with its recreational facilities for all ages, as the site of their May 19-21 weekend outing. A potluck dinner will gather the entire camp together for an evening of song and camaraderie.

SD people with a yen for getting away from it all, at least for a weekend, are invited to join the Road Runner outings, said Lowell Ward, club spokesman.

The March outing into De Anza Desert drew a record turnout of 20 trailers and three campers with 93 people making the trip.

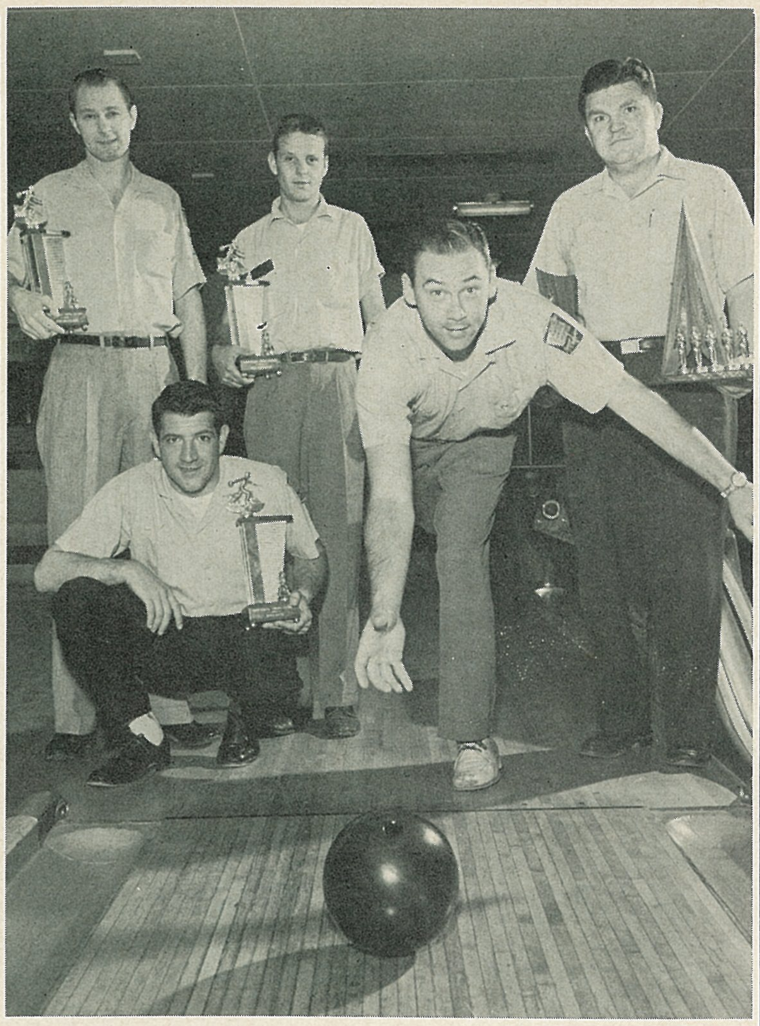
For information on the coming weekend campout, call Harold Perkins, club president, at JU-2-3291.

Extra Golf Round Planned at Bonita

A "bonus" golf event not listed on CRA's annual sweeps schedule will be played May 27-28 at the new Bonita course east of Chula Vista.

"Play has been scheduled to give CRA linksmen an opportunity to try out the new course which is usually limited to members' play only," said Ken Wulfemeyer, CRA golf commissioner.

"Naturally, the new course is still under development, but linksmen will find it an enjoyable round," he added. No tourney prizes will be given. Green fees for Convair golfers will be $3.50. Reservations will be taken through May 19 at ext. 1705, Plant 1.



ROLLING—John Dravland (Dept. 401) displays form that enabled him to roll high series—684—in Industrial Swing League. He and his Convair Jet teammates placed first in league. Crouching is Art Pegas (Dept. 192). Standing (from left): Herb Ruth (Dept. 192), Rick Schumaker (Dept. 160) and R. A. Zwolinski (Dept. 401), team captain.

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

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ARCHERY — Convair open shoot May 14, Balboa Park field range. Registration, 8-9:15 a.m.; shooting begins at 9:30 a.m. Next club meeting Thursday (May 18) CRA Clubhouse, Pacific Hwy., 7:30 p.m.

ASTRONOMY — Meeting Friday (May 19), 8 p.m., CRA Recreation Area, Gillespie Field.

BADMINTON — Open play Tuesdays, 7:30 p.m., Federal Bldg., Balboa Park.

BRIDGE CLUB—Weekly sessions Tuesday evenings, 7:30 p.m., Barcelona Hotel, 326 Juniper St.

CAMERA CLUB — Meeting May 22, 7:30 p.m., Photo Arts Bldg., Balboa Park.

COIN CLUB — Meeting Thursday (May 18), 7:30 p.m., executive dining room of Convair cafeteria, Pacific Hwy.

DELTA DIVERS — Family dive, La Jolla Cove, May 21, 11 a.m. Meeting May 23, 7:30 p.m., Balboa Park Conference Bldg.

FISHING—Potluck dinner and meeting May 16, 6 p.m., CRA Clubhouse, Gillespie Field.

GARDEN CLUB—Meeting tonight (May 10), 7:30 a.m., Floral Assoc. Bldg., Balboa Park.

GOLF—CRA sweeps May 27-28, Bonita course. Entries taken through May 19 at ext. 1705, Plant 1.

GUN CLUB — Registered ATA trap shoot May 14, 9:30 a.m., Gillespie Field range. Open shooting at CRA range every Wednesday, 5 p.m. until dark.

ICE SKATING — Skating sessions each Thursday at Iceland, 6055 Murray Blvd. Special Convair rates between 6:30-8 p.m.

JUDO—Workouts and instruction every Thursday, CRA Clubhouse, Pacific Hwy, 7-8:30 p.m.

MODEL RAILROAD — Business meeting May 12; "O"-scale operation May 26, both 7:30 p.m., House of Charm, Balboa Park.

MOVIES—Reduced-price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB — Next shoot May 14, 9 a.m., San Diego Police Pistol Range, Federal Blvd. & Home Ave.

RADIO CLUB—Meeting Thursday (May 11), 7:30 p.m., Radio Club Headquarters, Harbor Drive.

ROAD RUNNERS — Weekend outing to Live Oaks County Park, Fallbrook, May 19-21. Call Harold Perkins, JU-2-3291, for information.

ROCKHOUNDS — Meeting May 11, 7:30 p.m., CRA Clubhouse, Gillespie Field.

ROLLER SKATING — Convair skate night Monday (May 15) at Skateland, Front and G Sts. Free tickets at SD employee services.

SQUARE DANCING — Annual Hoedowners picnic, Pecan Park, May 21, 1 p.m.

WATER SKI CLUB — Weekend skiing on phone-call basis. Call Gene Sevigny, ext. 1032, or Herb Wexler, ext. 2366, both Plant 1.

SD Families Given 'Ben Hur' Discount

Convair SD families are being offered a flat 20 per cent off of all tickets to any showing of "Ben Hur" at the Capri Theater.

To obtain the discount, all that is necessary is to show a Convair ID card. The film will run at the Capri for 12 more days.

Lens Contest Awards Made

Four top color slides and black and white prints took honors at the quarterly contest conducted April 27 by Convair SD Camera Club.

Judged by Ken Rinker of the Astrolens Club, the print and slide entries were of exceptionally high caliber, according to Ron Ainsworth, club spokesman.

Deserving of special mention in the competition were the black and white entries of H. M. Harvey (Dept. 6) and an impressionistic print submitted by Allen Henny (Dept. 6) which was the subject of considerable discussion.

Copping color honors in the contest were Bill Wallace (Dept. 6) and Ron Ainsworth (Dept. 144). Ainsworth, and his wife Joan, also walked off with best print honors.

At the May 8 meeting and model shoot Fred Reynolds (Dept. 192) and his black beard proved to be a photogenic subject.

Next scheduled meeting on May 22 will include a slide showing for members and guests. The event will get started at 7:30 p.m. in the Photo Arts Bldg., Balboa Park.

Monday Deadline For Reservations On Hawaii Holiday

Only a few days remain for the undecided to make up their minds and wing away on a "Hawaiian Holiday" in July.

There are still openings for the July 1-9 plane flight, said Martha Woodberry of SD employee services. But all Convair SD people who intend to go must have their $50 deposit in by next Monday (May 15).

Entire cost of round-trip transportation via Pan-American World Airways DC-7 from Los Angeles and back is $298.50. This amount also includes hotel accommodations at a Waikiki Beach hotel and guided tours during the week.

First planeload filled will take 87 Convair SD and Pomona travelers on the same tour July 15-23.

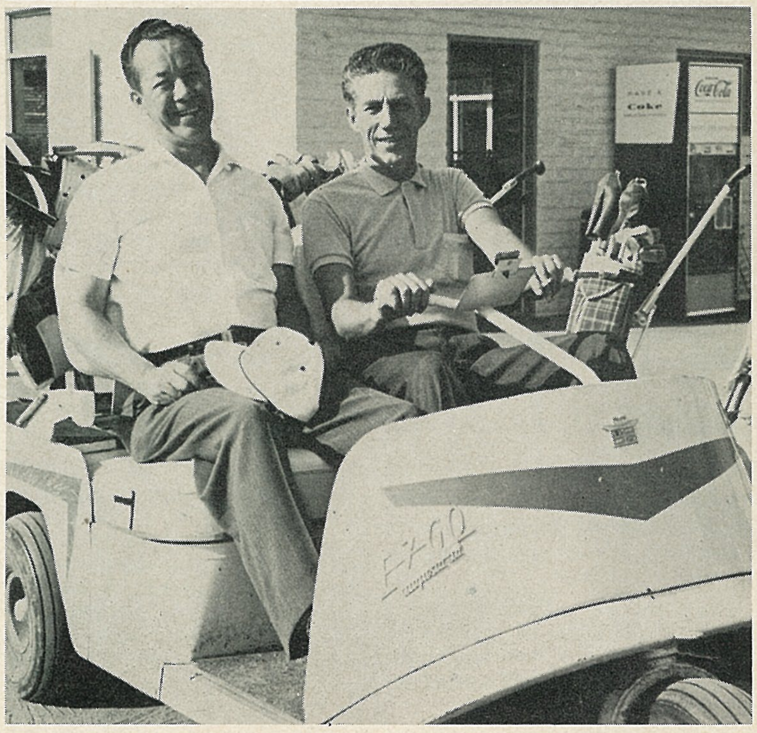
For complete information call Mrs. Woodberry, ext. 1245, Plant 1.

Family Dive Set At La Jolla Cove

Ma, pa, and all the kids will be going underwater at Delta Divers' family dive Sunday (May 21).

Convair SD skin diving fans and their families will gather at La Jolla Cove at 11 a.m., for a day of fun.

Underwater movies will be shown at the next meeting of the CRA group in the Conference Bldg., Balboa Park, May 23, at 7:30 p.m.



ORGANIZERS—San Diego Management Club golf sweeps April 16 at El Camino attracted capacity number of 120 linksmen. Event was organized by D. R. Bryson (left), two-year member of club board, and C. W. Maxfield, golf chairman.



FAR-AWAY PLACES—First Convair SD customer service reps leaving for foreign parts in support of Convair 880-Ms point to future bases in various parts of world: (from left) Phil Smith, Formosa; Jerry Dugan, Japan; George Pohlman and Ralph Avila, Venezuela; Frank Laffoon, Switzerland.

Five 880-M Field Men On Foreign Assignment

Fanning out to all parts of the world are five Convair SD customer service representatives, vanguard of Convair SD support for 880-M jet transports purchased by airlines in other countries.

First to leave for a foreign base was Jerry Dugan. He emplaned April 28 for Tokyo, Japan, where he will be stationed at Japan Air Lines headquarters to prepare for arrival of their first Convair jet early this summer.

Phil Smith left San Diego May 3 for Taipei, Formosa. Next to go will be George Pohlman this month, and Ralph Avila in June, to Caracas, Venezuela. Frank Laffoon will return the first of July to his former station at Zurich, Switzerland.

A Convair 880-M is slated for ferrying to Civil Air Transport at Formosa within the next month; to Avensa, Venezuela, and JAL, Tokyo, in June. Swissair at Zurich will get two 880-Ms in late summer.

Field service representatives are sent to customer airline bases a month or two ahead of plane delivery to set the stage for arrival of Convair jet transports, explained L. J. Bordelon, chief of transport service at SD. They check spare parts, ground equipment, supplies; become acquainted with the company and personnel responsible for maintenance; set up their own office procedure; and lend assistance to the customer in any way they can.

Cameras and typewriters are "stock in trade" for each man—they pound out daily and weekly reports to the SD home base. Among their baggage are four or five counter files or wooden foot lockers containing several hundred pounds of reference material—code files, spare parts manuals, maintenance manuals, correspondence files.

Dugan, Avila, and Laffoon are taking their families and plan to set up housekeeping as much as possible in the style of the country in which they'll be living for a year or two.

Laffoon will be going back home — he was based at Zurich for three years during Convair-Liner 440 days. Smith spent some time at Taipei last fall during maintenance training of CAT ground crews. Pohlman's last foreign base was with Iberia at Madrid, Spain. All of the five have been serving at U.S. bases as 880s have gone to domestic airlines. Dugan was with TWA at Los Angeles; Avila in Boston with Northeast; Pohlman at Atlanta with Delta; Laffoon at Atlanta, Los Angeles, and Idlewild, N.Y.; and Smith at Boston and Idlewild.

Other SD field service representatives will be going far afield as the need arises.

FOUR CHOSEN FOR GRADUATE AWARDS

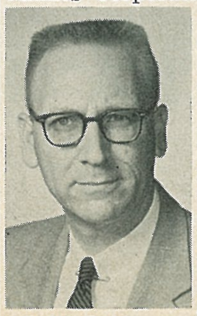
Graduate awards given annually by Convair San Diego to promising students in the fields of engineering and science have gone this year to four young men—three working toward master's degrees in aeronautical engineering and one for a Ph.D. in physics.

The awards, $100 a month for 10 months, go to Edward Kenn Clark, Detroit, Mich., attending University of Michigan for master's in aeronautical engineering; Reiner Decher, native of Dessau, Germany, planning to enter Massachusetts Institute of Technology for M.A.E.; William Russell Seebaugh of Ventnor, N.J., Rensselaer Polytechnic Institute, Troy, N.Y., M.S. in aeronautical engineering; and Thomas John Barrett of Chicago, Ill., who will attend University of Utah for his Ph.D. in physics. Barrett received his master's in physics from San Diego State last year.

H. W. Rubottom, chief of educational services at SD, and R. H. Nall, educational services supervisor, were in charge of selection of award winners.

E. W. Feddersen Shifted to SD

E. W. Feddersen was named Convair director of manufacturing development effective May 1, announced C. Rhoades MacBride, Convair president and executive vice president of General Dynamics Corporation.



E. W. Feddersen

Feddersen comes to General Office from Convair Fort Worth, where he had been administrator for the B-70 program. In his new appointment he will be responsible for value control activities for all Convair, reporting directly to R. C. Sebold, vice president-engineering.

He succeeds J. H. Famme who is now assistant manager-operations for Convair San Diego.

"Since it is of utmost importance that we design and build quality products at the least cost, if we are to maintain our competitive position, I expect maximum cooperation with the new director of manufacturing development," said MacBride.

Joining Convair SD in 1940 as draftsman, Feddersen transferred to Fort Worth operating division two years later. Except for a year, in 1946, when he left Convair to work for Barnes and Reinecke, Chicago, Ill., and Ryan Aeronautical Co., San Diego, Feddersen had been at FW ever since. He rose through a number of engineering positions to chief of manufacturing research and development in 1957. He was named B-70 project administrator in December of last year.

Replacing him as B-70 director at Fort Worth is R. A. Fuhrer, chief manufacturing engineer. Fuhrer served as tool and planning department head and factory manager for Curtiss-Wright Corp. for 18 years, and manager of manufacturing engineering at General Electric for five years before joining Convair FW.

Handpicked Students Trained In Special Programer Skills

Sixteen Convair San Diego people—14 men and two women—have proved that opportunities never end.

Chosen from every department in the SD plants, from production line to quality control and service publications, to name a few, they are the latest to complete Convair-IBM training for computer programers. As such, they will form a pool of active trained programers qualified to work in SD electronic data processing operations involving the 705-3 computer at Convair SD, said G. O. Withem, chief of data processing.

Those not drawn into the programing function immediately will continue their training in-plant for four hours a week until they are needed, explained W. E. Newton, SD educational services coordinator for data processing.

"Success of our screening and selection program for data processing points up the many opportunities open to all Convair SD people to better themselves," stressed Newton. "They have only to expend the extra effort for outside courses, maintain good work and attendance records to have a chance at better jobs within Convair.

"Educational services is striving constantly through its training courses not only to teach our own people how to do their work better and more efficiently, but to open new fields for qualified persons."

According to R. C. Loomis, SD manager, in announcing the current training program, "A nationwide shortage of electronic data processing programers forces us to search within our organization for people with this skill potential. Past experience supports the feeling that we have people with this aptitude if we use intelligent methods of selection and screening."

Developing an efficient work force is necessary in the success of every enterprise, Withem pointed out. "A great deal of study has been given to improvement of selection techniques," he continued. "The selection of these trainees is important in filling existing vacancies adequately and developing a core of personnel competent to program for business computers now and in the future."

In the more than two years since IBM data processing equipment was installed at Convair SD, at least 40 persons have been chosen from within the plant for training, said T. R. Dines, general supervisor EDP programing and methods selection. These were selected from the several hundred applicants on a basis of aptitude, interest, education, ability as evidenced in work records. High school education is the minimum required, though further training courses or some college work is preferred. Accounting experience or mathematical background is desirable.

Educational services, employment office, and data processing combine efforts in evaluation of applicants.

Those surviving the screening are sent to school eight hours a day for five weeks. IBM cooperates with Convair in the mutual training effort, giving the first 100 hours of formal class work at its Fifth St. headquarters. Then trainees are brought back into the plant for a second 100 hours under Convair SD instructors.

The 705-3 class, which ended last week, will be the last scheduled this summer, although other classes are planned on a continuing basis as the need arises.

Two other computer programing classes are now under way in preparation for arrival of three new IBM 1401 computers expected some time this summer. The 1401s are medium-size high speed computers of advanced design which will expand capabilities of data processing operations at SD. (Astronautics also is due to receive similar computer equipment within the near future.)

Dynamics Booth Features F-106 Egress System

Convair played an active role for the first time in the annual Flight Safety and Unit Commanders Conference of Air National Guard held this year at Ellington AFB, Houston, Texas, April 19-21.

Eleven Convair men, closely connected with military operations, were among 726 company representatives and Air Force officials representing ANG, Hdqrs. ADC, TAC, and MATS. Briefings dealt with ANG activities projected during the 1961-62 fiscal year with emphasis on flight safety.

P. A. Carlson of Model 8 project office spoke on "Growth Potential of the F-102 in ANG," and R. E. Myrann, chief pilot, Palmdale facility, participated in an F-102 flight symposium.

H. B. Henderson of Convair Washington, D.C., office took part in a televised panel discussion open to questions from the public on supersonic flight. Also on the panel were Maj. Gen. W. P. Wilson, deputy chief ANG; Maj. Jack Burden, 111th FIS commander; and Robert Hoover, North American pilot.

All Convair delegates shared the manning of a General Dynamics display centered around the F-106 supersonic egress system. An F-102 and F-106 were on static display. Convair also hosted a dinner for the group on April 20.

Besides Henderson, Carlson, and Myrann, those representing Convair were K. M. Smith, Convair director military relations; Rex Warden, assistant to director military relations; J. J. Walden Jr., manager San Antonio office; George Buchner, SD manager contracts and customer service; O. W. Harper, manager SD customer service; Roy Sommers, chief interceptor service; Hal Wilson, interceptor service assistant supervisor; R. H. Gill, service parts military assistant supervisor.

Convair F-102s now are assigned to seven ANG squadrons.

Both TWA and Delta Set Speed Marks With 880s

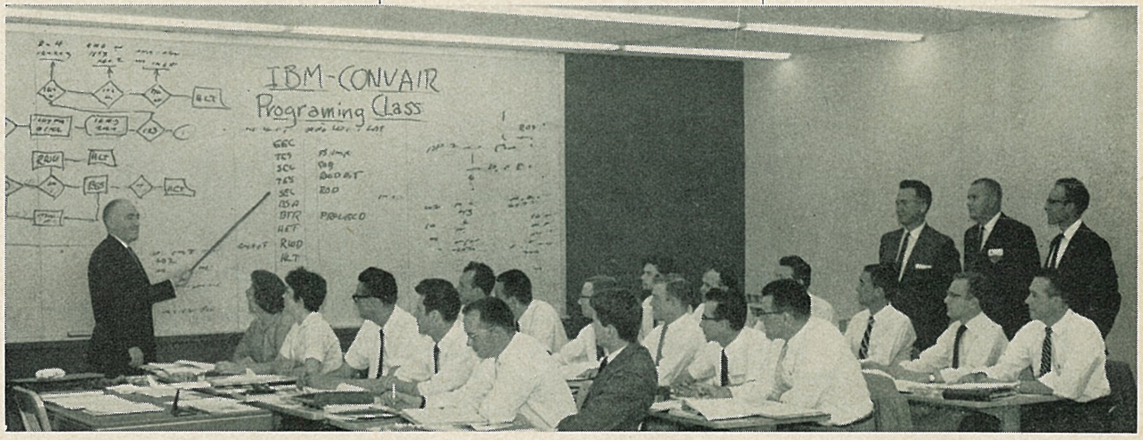
Two Convair 880s, one operated by Delta Air Lines and the other by Trans World Airlines, sped to unofficial speed records during April.

On April 19, a Delta 880 set a mark of one hour, 59 minutes on a Chicago-Miami nonstop flight clipping 31 minutes off the scheduled time.

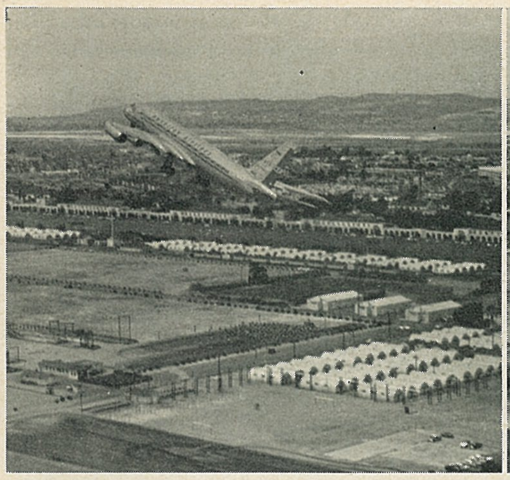
Capt. Howard Reid of Miami averaged 627 miles per hour for the assigned route of 1,229 miles. Aided by a tailwind at times in excess of 75 knots, he reached a top ground speed of 761 miles per hour over Atlanta, flying at 37,000 feet.

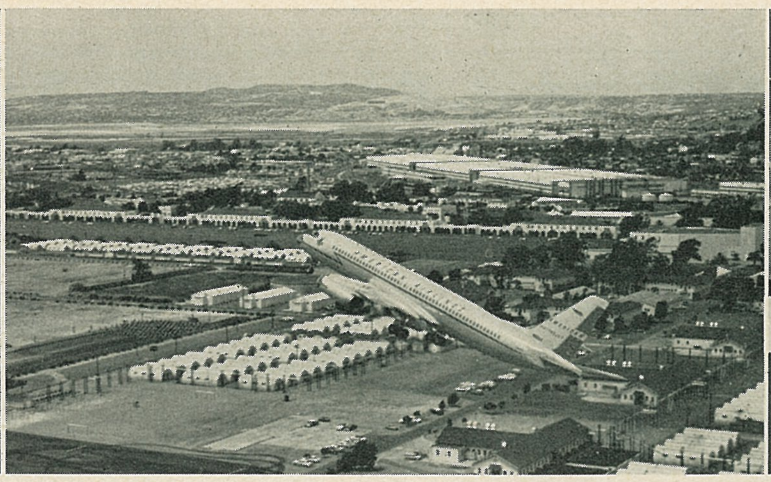
Also with the help of a tailwind, another Convair 880, operating as TWA flight 146, attained a top ground speed of 797 miles per hour between Albuquerque and Amarillo, flying at 31,000 feet.

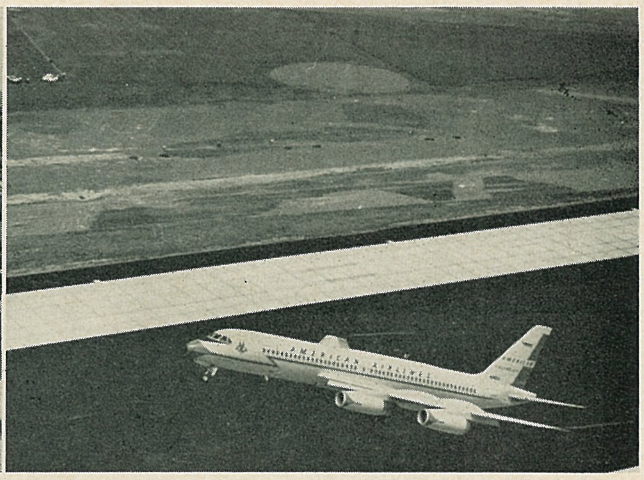
The plane set a speed record for the Phoenix to Chicago run, covering the route in two hours, 18 minutes. One of Capt. William Butler's passengers was Ernest R. Breech, a TWA trustee.



CLASS TIME—Future data processing programers for Convair SD during class period at IBM headquarters, 2760 Fifth Ave., SD, are instructed by Gene Kipnis, IBM systems engineer. At right (standing), left to right, are John Couch, IBM data processing manager of SD office; G. O. Withem, chief SD data processing; Warren Newton, SD educational services.







TAKEOFF—First takeoff photos of American Airlines 990 show plane leaving Lindbergh Field. In center picture, Plant 2 is in background. Pictures were taken by SD lensman Dan Otto shooting from helicopter hovering near runway. 990s will start going to airlines this fall after FAA certification.

GENERAL DYNAMICS

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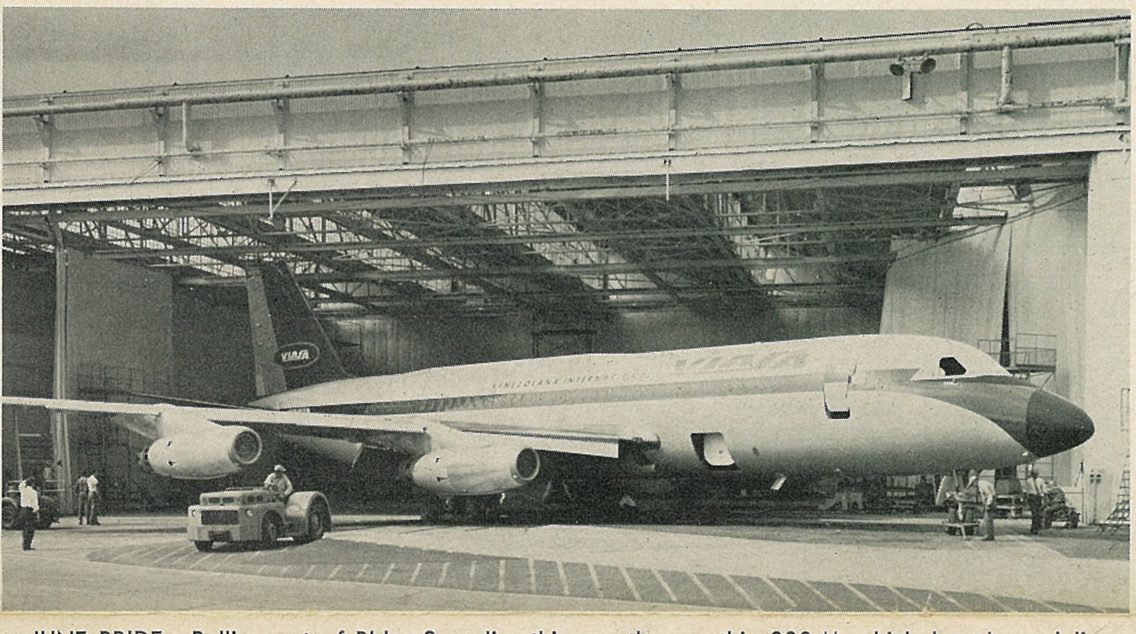
Convairiety

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SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. — ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.



JUNE BRIDE—Rolling out of Bldg. 3 earlier this month was this 880-M which has June delivery date to Viasa, Venezuelan international airline. Note enormous curtains in Bldg. 3 which "seal in" area during painting process. Other 880-M deliveries are slated in June to Civil Air Transport and Japan Air Lines.

Jet 990 Flown To Brink of Speed of Sound

A Convair 990 jet airliner early this month flew faster than any other passenger transport in the world—reaching Mach .97, only three per cent short of the speed of sound.

The 990 set the record May 8 at an altitude of 22,500 feet over the Pacific Ocean between Santa Catalina Island and San Diego. The plane attained a true air speed of 675 miles an hour.

In making the announcement, R. C. Loomis, Convair SD division manager, also said that in the so-called "Q" range of critical aerodynamic stress, the 990 has been flown faster than any other transport—462 knots indicated air speed (640 mph true air speed) at 14,000 feet.

Flying the 990 in the transonic range at Mach. 97 "was as easy as flying earlier jet transports at much slower speeds," according to Don Germeraad, chief engineering test pilot at SD. He said this was due to the effect of the 990's aerodynamic anti-shock bodies—four capsules on the upper surface of the wing.

The 990 will be certified for Mach .91 flight when introduced on commercial airlines the end of this year. This is substantially faster than any other jet transport. The Mach .97 speed was demonstrated to show that there is a safe "cushion" between the airlines operating limit and the airplane's capability.

With Germeraad on the record-breaking 990 flight were John Knebel, co-pilot; A. E. Hunt, flight test engineer; R. J. Dunn, instrumentation engineer; and R. M. Bloom, flight engineer.

The Mach .97 flight was also one of a series of speed demonstrations to prove out a design change which shifted the posi-

(Continued on Page 2)

880 Jets Pass First Year in Airline Service

Convair 880 jet transports were proving that they are planes to be counted on — by crews and passengers—as they ended their first year in passenger service.

Delta Air Lines marked its first anniversary of 880 jet service May 15. First 880s to go on scheduled passenger runs flew inaugural flights with Delta just a year ago that day from Atlanta to New York, New Orleans-New York, and Houston-New York.

C. Rhoades MacBride, General Dynamics executive vice president, and J. G. Zevely, Convair vice president—commercial sales, wired congratulations to C. E. Woolman, Delta president, for "outstanding job done by Delta Air Lines in developing and integrating Convair 880 jet airliners."

Delta now serves an even dozen Eastern and Midwestern

(Continued on Page 5)

Increased ES, CIP Flow Vital to Reach Goals

A growing need for more and better cost-cutting ideas is evident at Convair San Diego.

During the first four months of 1961 a majority of departments have fallen behind their cost reduction goals.

"More and better Employee Suggestions and Cost Improvement Proposals are urgently needed," said J. J. Ireland, supervisor, cost reduction section, systems and procedures.

"All Convair SD persons, hourly and flat-salaried, are asked to make a determined effort to spot ways to save money and man-hours in their areas during the remainder of 1961," said Ireland.

"The $2½-million total division goal established is realistic," he added. "The fact that some departments are keeping pace percentagewise with their goals and others have already matched them should be an incentive to those departments still down in the standings."

During the first four months of the year direct departments have realized 20 per cent of their total target of $1,050,000; indirect departments have saved 7 per cent of their $1,450,000 goal. Both groups are well below the 33 per cent mark which should now be attained.

By department, the following are leading the direct category. Dept. 119 has passed its $10,000 goal by 310 per cent; Dept. 129 has overshot its $25,000 target by 164 per cent. Keeping pace

(Continued on Page 2)

JAL and Viasa Training at SD

Flight crews who soon will be flying Convair 880-Ms for Japan Air Lines and Viasa, Venezuelan airline, are at San Diego plant this month learning the fine points of the Convair jetliner.

Convair 880-Ms will go to JAL and Viasa, government-controlled Venezolana Internacionale de Aviacion, S. A. (formerly Avensa), within the next few weeks.

JAL crew members are arriving at San Diego in groups of seven a week for familiarization in the cockpit procedures trainer in SD production flight training section. Basic ground training is now under way at Tokyo. Instructors are crew members who took Convair-furnished classes at SD last fall. Flight crew training on the plane will start at San Diego next month.

(Continued on Page 2)

Buildup of Electronics Design Capability Anticipated For SD

Buildup of a greater electronics design capability, which will place San Diego division in better position to attract new business, is under way.

"At present our primary objective is to attract highly competent and extremely well-qualified electronics technical managers who command considerable stature in their fields," said W. R. Monroe, SD manager of reliability and chief electronics design engineer, who has been given responsibility for the expansion.

"It should be emphasized," he said, "that the electronics expansion is aimed at future programs. Our present electronics capability to support existing programs is on strong footing."

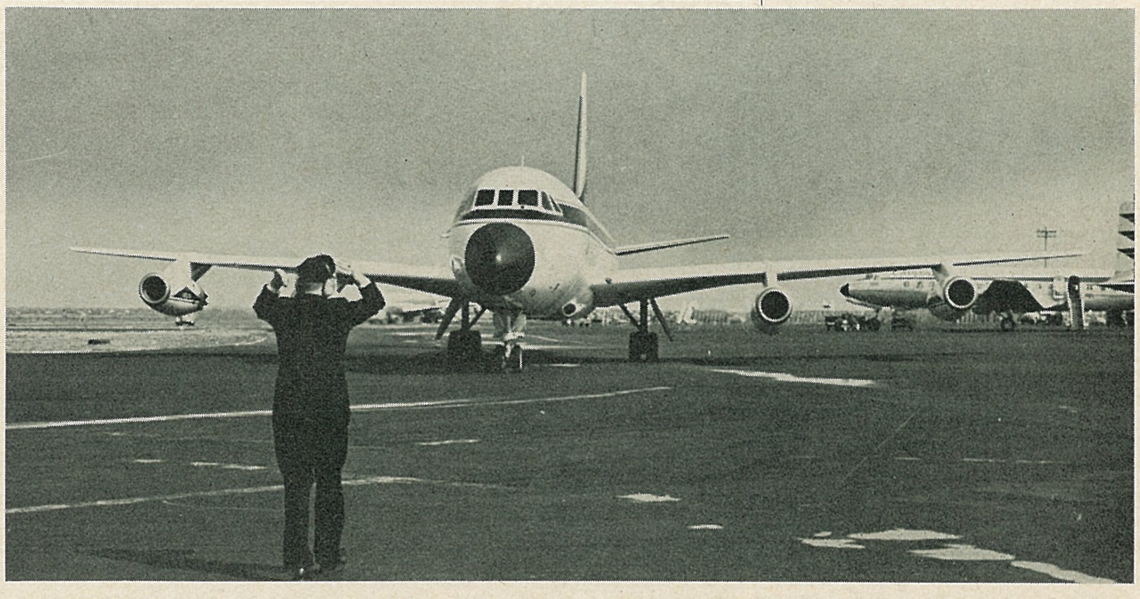
He added: "At the same time we will not overlook talent and ability within the engineering department now at SD. The fact remains, however, that these persons are already in essential jobs and must devote full-time attention to them."

First steps in the San Diego electronics expansion have already been taken in the form of advance planning and organization and framework as well as determining qualifications of persons to staff the department.

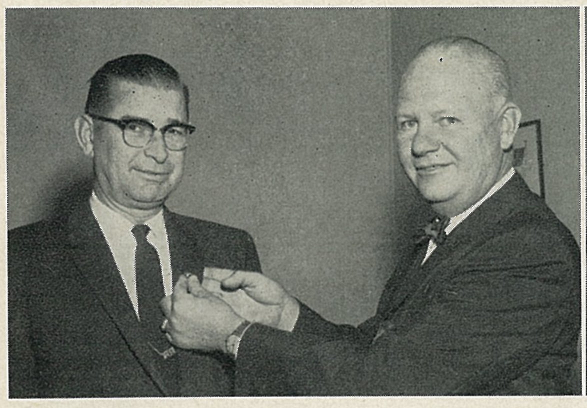
"It is obvious that this expansion will take some time and we are unable now to pinpoint it in terms of numbers of new employees. Quality of personnel—and not quantity—will be the objective," said Monroe.

The decision to expand electronics capabilities at Convair SD is that of top management and stems, in part, from the

(Continued on Page 2)



REMEMBER?—Just a year ago this month Convair 880s began carrying passengers over Delta Air Line routes. Above shot, taken last May 15, shows plane spotter directing 880 at Idlewild Airport, N.Y., on inaugural day.







TWENTY-FIVE YEARS—Three SD men were recognized this month for quarter century of Convair service. At far left, A. E. Andress, SD manager systems and procedures and data processing, receives service emblem from D. C. Burrows, SD controller. Left center, C. A. Gerber, design specialist, receives congratulations from W. W. Fox, SD chief engineer. In photo at right is C. A. Mohr, project engineer, also honored, and E. D. Shannon, engineering staff specialist.

JAL and Viasa Crews Training at SD

(Continued from Page 1)

Seventeen Viasa flight crew members—five captains, five first officers, seven second officers—are at San Diego for their first five-week crew training course before going into four weeks of pilot training in June.

They also are getting a minimum of 10 hours in the cockpit procedures trainer with the trainer doing yeoman duty—in operation eight hours a day.

Flight engineer/instructors in formal class sessions are J. B. Van Houten, C. L. Falkenthal, and T. H. Johnson.

Log Book Entries

Service Emblems

SAN DIEGO

Service emblems due during the period May 16 through May 31.

Twenty-five-year: Dept. 1-31, R. I. Morse; Dept. 6-5, C. L. Hibert.

Twenty-year: Dept. 3-1, F. H. Schoolcraft; Dept. 21-1, C. P. Zarrad; Dept. 44-7, W. A. Moss; Dept. 90-0, C. L. Polsley; Dept. 91-7, J. E. McCambridge; Dept. 101, Scotty Boyd; Dept. 140, E. H. Ulsund; Dept. 141, W. E. Smith Jr.; Dept. 400, A. M. Bowen, O. L. Hunley; Dept. 401, J. H. Belkonen, W. P. Cross.

Fifteen-year: Dept. 1-65, A. J. Fokker; Dept. 6, Steve Jurchenko Jr., A. R. Perl; Dept. 15, S. D. Berling; Dept. 25, H. F. Hamlin; Dept. 31, J. K. Laursen; Dept. 101, Marion H. Thrasher; Dept. 133, Lizzie H. Hollingsworth; Dept. 280, E. M. Manion; Dept. 400, R. E. Cringler; Dept. 401, W. H. Byam, R. A. Wood.

Ten-year: Dept. 1-71, I. M. Nestingen; Dept. 3, J. H. Crousen, J. R. Nelson; Dept. 6, E. K. Ames, E. W. Boteler, George Chasinowitz, W. E. Mooney Jr., C. W. Robeson; Dept. 7, J. H. McIlroy, Freda P. LaFrenere, C. E. Overhulser, Ethel W. Sharp.

Dept. 14, H. E. Hayes, Blanche H. Higginbotham, H. J. Scott; Dept. 15, R. L. Heath; Dept. 21, J. M. Mohring; Dept. 44, Loula J. Costello; Dept. 46, Leonard Colbert; Dept. 69, G. A. Jarvis; Dept. 91, Helen W. Freres, Betty E. Small; Dept. 97, Wilda H. Grimes; Dept. 101, Christine D. Hincman, Mavis Taylor; Dept. 110, C. W. Taylor; Dept. 115, Laura E. Williams; Dept. 116, Rosie M. Wright; Dept. 129, Angie L. Peralto; Dept. 137, Josephine W. Hawkins; Dept. 140, A. C. Grupe; Dept. 148, J. R. Crawley.

Dept. 171, F. R. Griffin, Dale Miller; Dept. 180, Daniel Johnson; Dept. 190, Rose V. Carter; Dept. 192, Evelyn W. Ives; Dept. 201, Mary J. Hinrichs; Dept. 215, F. J. Thomson; Dept. 218, Helen W. Wittig; Dept. 223, E. G. Goslin; Dept. 249, L. W. Beezley; Dept. 271, R. H. Ruby; Dept. 288, Dorothy D. Bohannan; Dept. 400, Lucille L. Goodale; Dept. 401, John Benson, E. J. Sabin, Vera C. Whitbey.

HOLLOMAN AFB

Twenty-year: Dept. 313-4, J. W. Harlow.

PALMDALE

Ten-year: Dept. 321-1, E. A. Fish, W. J. Hoofard.

Personals

SAN DIEGO

On behalf of myself and my family I wish to thank the group at field operations for the beautiful flowers and kindnesses shown at the time of loss of my mother, Mrs. Minnie Davis.

R. E. Davis, Dept. 288-8.

* * *

Thank you so very much for the especially beautiful flowers and memorial contribution to the Heart Association in memory of my husband, Gary Byrne, Dept. 292. I appreciate your kind thoughtfulness more than I can say.

Mrs. Esther Byrne.

* * *

We wish to thank our friends for the flowers and messages of sympathy received at the time we lost our father, C. O. "Pappy" Cole.

Mr. and Mrs. R. A. Buss, Dept. 160.

* * *

The kind expressions of sympathy from Convair folk at the death of R. L. "Smokey" Adams, formerly Dept. 288-3, is deeply appreciated.

Mrs. Robert L. Adams and family.

Births

SAN DIEGO

DUCHENE—Son, David Michael, 8 lbs., 6 oz., born April 28 to Mr. and Mrs. D. P. Duchene, Dept. 6.

FORTSON—Twin sons, John Hubbard, 5 lbs., 4 oz., and Joseph William, 5 lbs., 6 oz., born April 13 to Mr. and Mrs. M. V. Fortson, Dept. 192-3.

JOHNSON—Son, Ray Melhouse, 6 lbs., 11½ oz., born April 17 to Mr. and Mrs. G. C. Johnson, Dept. 160.

TACTAY—Son, Eulalio, 6 lbs., 3 oz., born April 29 to Mr. and Mrs. B. U. Tactay, Dept. 140.

Deaths

SAN DIEGO

HARBEN—Mabre M., Dept. 188-3. Auto accident May 13. Survived by wife, Mary, and daughter, Audry.

Promotions

SAN DIEGO

Promotions to or within supervision effective May 8.

Dept. 31, Experimental: To asst. foreman, A. A. Toth.

Dept. 146, Jet Transport Wing Primary & Wing Mate: To foreman, B. R. Kaiser. To asst. foreman, J. A. Carrieres, E. L. Chapman, W. E. Goble Jr., L. D. Jacobs, D. C. Lakin, R. F. Richter, R. A. Silva, D. N. Smith.

Dept. 192, Material Control-Plant 1: To M/C foreman, R. E. Hart. To M/C asst. foreman, L. L. Sowles. To M/C asst. supervisor, A. F. Thorogood.

Retirements

SAN DIEGO

GRAY—Walter R., General Dynamics/Electronics. Seniority date Nov. 22, 1950, retirement effective May 12, 1961.

McKITTRICK—M. T., Dept. 3-1. Seniority date Aug. 28, 1952, retirement effective March 21, 1961.

NICOLL—George, Dept. 188-5. Seniority date March 18, 1947, retirement effective Jan. 23, 1961.

Greater CIP, ES Flow Vital

(Continued from Page 1)

percentagewise at this point are Depts. 146, 140, 135, 137, 117, 136, 102, 266.

Among indirect departments after the first four months only 44 and 3 are ahead of the monthly quota, with 63 and 69 per cent, respectively. No other indirect departments are near the 33 per cent figure which should now be reached.

In submitting ESs or CIPs employees are reminded not to overlook what seems to them an obvious or simple improvement of a system or method of fabrication.

"A review of top money savers in the past shows these ideas for the most part are simple in conception and easy to install," said Ireland.

"For instance, the top three Cost Improvement Proposals during the past three months all had one thing in common: installation cost was almost nil.

"Nothing is more important in the division at the present time than turning out a quality product at reduced cost, on schedule. If everyone puts some thought into the ES and CIP programs a substantial contribution can be made to lower the cost of airplanes and cut the number of manhours," Ireland added.

SD Engineering Girl Seeking State Title

Evangelina Cameron, 20, of Convair SD engineering department, will compete next month at Riverside for title of state queen of the American GI Forum.

The Convair girl will represent SD chapter of the veterans organization after winning the local crown at a contest held recently at Hotel del Coronado.

★ Convairiety ★

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FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.



MILESTONE — W. R. Panke, Dept. 140, early this month received his 35-year emblem for Convair service. He is the eleventh person in the SD Division to be so honored.

Convair 990 Speeds To Brink of Sound

(Continued from Page 1)

tion of the outboard engine pod aft 28 inches.

The transonic speed of the newest of Convair's jets results from two advances in design—a new high-speed wing, and a new aft-fan jet engine developed by General Electric.

A total of six 990s will be utilized in the Convair and Federal Aviation Agency test program leading to a provisional FAA certificate in October and a final certification in December.

Deliveries to airlines will begin during the fall. First to put the Convair 990 and its intercontinental version, the Convair 990 Coronado, into service will be American Airlines, Swissair, Scandinavian Airlines System and Real Aerovias of Brazil.

STEPHENSON NOW PROPULSION CHIEF

Appointment of F. A. Stephenson as chief of mechanical and propulsion design at Convair SD has been announced by W. W. Fox, chief engineer.

A graduate of Colorado University, Stephenson joined Convair SD in 1941, spent the next three years as a pilot in the Army Air Corps, then rejoined the company. He became a thermodynamics engineer in 1951 and progressed to senior status in 1955.

Since April of 1960 Stephenson has been chief of environmental analysis in thermodynamics. He will be succeeded in that position by R. A. Nau.

Con-Trib Donations Of $11,900 Okayed

SD Employees' Con-Trib-Club Committee approved donations of $11,900 to organizations in the San Diego area this month.

San Miguel Hospital Association, Inc., had its building fund boosted by $5,000. The new hospital was dedicated April 16. Another $5,000 went to San Diego County Boy Scouts of America.

Crossroad Foundation received $750; Jamul-Las Flores Community Club Inc., $150; YWCA, $1,000.

Facility Set Up at Edwards AFB For 880-M and 990 Flight Tests

Another step toward Federal Aviation Agency certification of the Convair 880-M and 990 was taken early this month with the activation of a new SD facility—Dept. 318—at Edwards Air Force Base.

Convair SD operations at Edwards will extend for approximately six months, phasing out in early November with completion of the 990 test flights.

Operations will hit a peak at Edwards in September when some 150 persons will be assigned there.

V. L. Allwardt, chief of SD engineering flight test, said 880-M and 990 flights at Edwards would primarily consist of FAA landing and takeoff performance demonstrations, including exhaustive testing of brakes and anti-skid system.

Other tests for climb performance and stability and control at heavy gross weights would also be accomplished, he said.

Named to head the Edwards effort is Fred Goodrich, formerly with Convair operations at Holloman Air Force Base. In effect, the new department will be an extension of SD capabilities, including in addition to engineering flight test, the following groups: inspection and FAA function headed by Jim Wallace; field operations under V. A. Brown; experimental factory instrumentation under E. Luffe; plant engineering and transportation operations under Brown (acting); and security headed by R. S. Cook.

As the program gains momentum as many as two 880-Ms (Nos. 1 and 37) and three 990s (Nos. 1, 2 and 4) will be conducting test flights at Edwards.

Earlier this month 880-M No. 1, beginning the landing and takeoff tests at Edwards, made a brakes-only stop 2,900 feet after crossing the mythical "50-foot obstacle" in landing. The demonstration was made at 125,-000 pounds.

The Convair 880-M's stall speed at 125,000 pounds has been demonstrated to be 97 knots, an improvement of about 10 knots as a result of the high-lift devices incorporated into the airplane.

Now flying the 880-M at Edwards is engineering test pilot W. M. Harse. Crew members are H. G. Schuette, senior flight test engineer; W. G. Walker, senior flight test instrumentation engineer; D. T. Kjell, senior flight test control engineer.

Shop and office facilities for Convair personnel at Edwards are in Bldg. 1881.

Convair will be returning to the Edwards site after an absence of about a year. From the fall of 1953 until May of 1960 Convair conducted test flights of different planes at Edwards.

Buildup of Electronics Design Capability Anticipated For SD

(Continued from Page 1)

growing importance of electronics in missiles and space systems and, in part, from reshaped long range planning necessitated because of the formation of General Dynamics/Electronics which absorbed several hundred SD electronics personnel.

Men selected for the new electronics management positions which have been created will be responsible for the conduct of detailed studies and will participate in the conceptual design of weapons systems, space systems, missiles and advanced aircraft.

Responsibilities of the men selected will be total—from concept through production and customer use—and involve close coordination with other departments in development of various systems.

"They will be given authority to develop and pursue areas of interest and also be given the opportunity to staff their groups with personnel qualified to get the job done," said Monroe.

The expansion program is being publicized by recruiters and advertisements.

The new positions now open indicate the form of the expansion from an organizational standpoint.

Each position includes responsibility for both development and production so that groups in each of the two areas will be able to coordinate their efforts as much as practicable. Where feasible, positions also include responsibility for component development.

FAA Issues 880-M Provisional Ticket

A "provisional ticket" was issued for the Convair 880-M by the Federal Aviation Agency last week. It permits customer airlines to begin crew training and route familiarization flights in advance of full FAA 880-M certification scheduled in July.

Ex-Apprentices FAA Certified

Two young Convair SD men, James Hamann and Theodore Fritzges, are the first to graduate from Convair's apprenticeship program and go on to become FAA certified flight engineers at Convair SD.

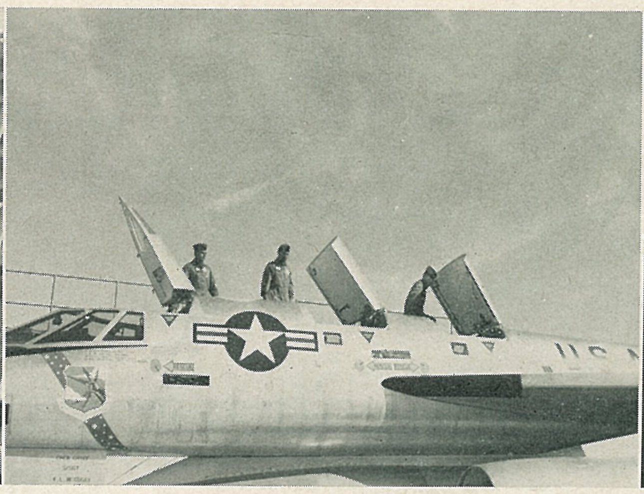
Completing four-year aircraft and engine mechanic apprenticeships last December, they were the first graduate apprentices to be assigned to SD production flight section. Since then, they have been given extensive training to prepare them for qualification as flight engineers. They join 11 other certified flight engineers at SD.

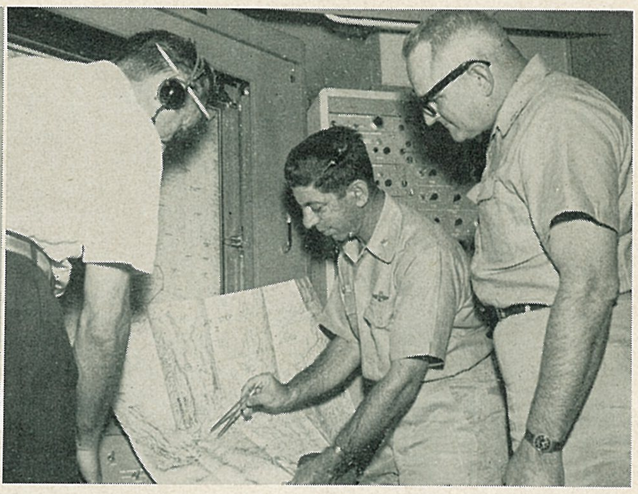
"They came through with flying colors," said L. W. Hughes, production flight training coordinator.

At present, they are instructing on the cockpit procedures trainer and flying as flight engineers on 880s. Later, they will serve as training instructors.

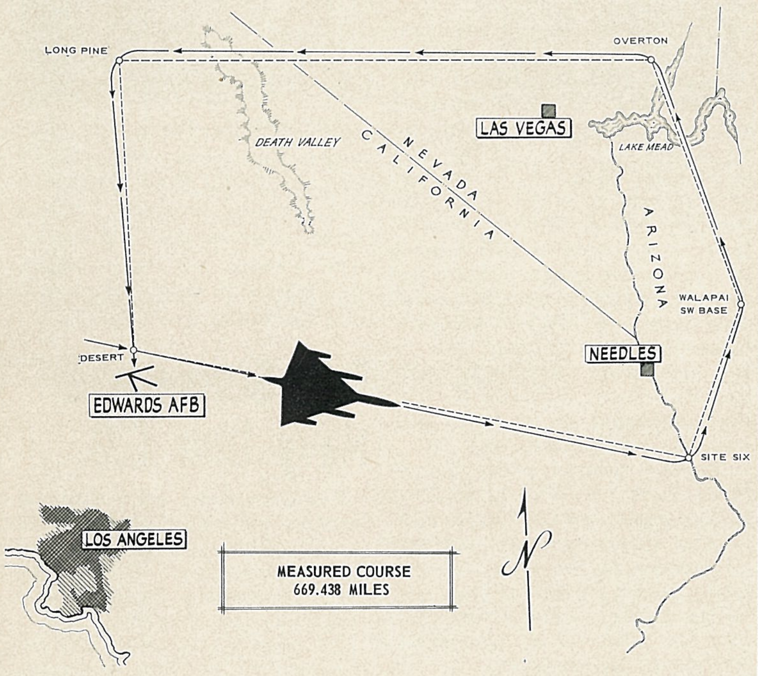
A third former SD apprentice, John Lutnick, is in production flight heading towards a rating of flight electronics engineer. He is now an electronics technician on the trainer.







SPEED DASH—Col. James K. Johnson in photo at left greets crew of B-58 that covered 669 miles in slightly more than half an hour. Crew members, from left: Maj. Eugene Moses, navigator-bombardier, Lt. David Dickerson, DSO, and Maj. Elmer E. Murphy, pilot. In center picture they are about to board bomber, while at right Moses plots his course. B-58 averaged 1,302 mph for sustained speed record and Bleriot Trophy.



RECORD ROUTE—Hustler set speed record on closed circuit course touching three states and covering nearly 670 miles.

B-58 Speeds Around 669 mi. Course At 1,302 mph to Win Bleriot Trophy

A B-58 Hustler averaged 1,302 mph around a 669.438-mile closed-circuit course at Edwards AFB May 10 to set a sustained speed record and qualify for the coveted Bleriot Trophy.

The trophy was offered by Frenchman Louis Bleriot in 1930 to the first aircraft which could average 2,000 kilometers an hour (1,243 mph) for 30 minutes.

A crew of Maj. Elmer E. Murphy, pilot; Maj. Eugene S. Moses, navigator-bombardier; and Lt. David S. Dickerson, DSO, herded Hustler No. 54—"The Firefly"—around the polygon-like course in 30 minutes, 43 seconds.

All crew members and maintenance personnel were from 65th Bomb Squadron of 43rd Bomb Wing, commanded by Col. James K. Johnson. The unit is part of SAC's 2nd Air Force.

Starting and ending at Edwards AFB, the course included corners at Needles, Calif., Kingman, Ariz., Morman Mesa, Nev., and Lone Pine, Calif.

"This gave us three almost 90-degree turns," Maj. Murphy said, "which of course cut our speed considerably at those points."

In negotiating the five-corner course and staying outside pylons at each point, the Hustler actually traveled 696 miles, according to Navigator Moses.

This meant that the Mach 2 bomber's actual average speed for distance traveled—which won't go down in the record book—was about 1,365 mph.

Altitude throughout the supersonic dash was between 43,000 and 50,000 feet.

Taking off from Edwards AFB, the record-making Hustler headed west to gain altitude and speed, then reversed its field and flashed across the starting line at Mach 2. The crew set a blistering 1,365 mph pace—top speed on the run—down the 198-mile first leg.

"It was the shortest 30 minutes I've had in a long time," Maj. Murphy said of the flight. "The airplane performed marvelously all the way."

The speed run was flown under supervision of National Aeronautic Association officials, who will forward their data to the Aero Club of France for official certification.

Made of pink and white marble, the 1,600-pound Bleriot Trophy is valued at $25,000. Crewmen are expected to receive the trophy in ceremonies later on.

"The Aerospace Year Book of 1960" lists the speed record for 1,000 kilometers (over closed-circuit without payload) as 700.-047 mph, set by a McDonnell RF-101 at Edwards AFB April 8, 1959.

"The Firefly" crew not only nearly doubled that speed, but bested the Jan. 14 flight of another 43rd Bomb Wing Hustler, which flew a 1,000-kilometer closed-circuit course at Edwards AFB at a speed of 1,284 mph.

Luncheon Will Honor Speed Record Crews

Two record-breaking crews from Carswell's 43rd Bomb Wing were to be honored at a May 19 Armed Forces Day luncheon at Hotel Texas.

Frank W. Davis, Convair vice president and FW manager, and E. J. Ducayet, president of Bell Helicopter Co., were to speak at the luncheon, co-sponsored by Downtown Rotary Club and Fort Worth Chamber of Commerce.

F-106s 'Fly Chase' on Redstone Speeding Astronaut Into Space

Two Convair SD-built F-106 jet interceptors, piloted by Project Mercury Astronauts, chased part way the rocket carrying Alan B. Shepard Jr. into space in a capsule earlier this month.

Press releases said "the F-106, which travels at better than 1,000 miles per hour, was chosen for this chase mission because it is the hottest-fastest-fighter craft the United States has."

Relatively close-up "eyeball" observation of the rocket's performance during its early flight phases was the task of Astronauts M. Scott Carpenter and Walter Schirra.

Seasoned pilots, the astronauts took off from Patrick AFB near Cape Canaveral, circled inland to Orlando about 45 miles away.

Seconds before the rocket was launched, they screamed out over the Atlantic missile range.

Carpenter flew at 25,000 feet and Schirra at 5,000 feet, according to press releases. Vapor trails of the planes could be seen from the ground.

In past unmanned shots with the Redstone, chase pilots have reported afterwards seeing the rocket separate from the capsule—an important event in such a space launch.

Lockheed Sponsors Education Meeting

J. L. Budros, assistant to Convair vice president—administration, and R. H. Nall, SD educational services supervisor, represented Convair at an Education-with-Industry Symposium sponsored by Lockheed Aircraft Corp. last week.

They were accompanied by the two Air Force officers based at Convair SD under the training-with-industry program, Maj. Jack Thacker and Capt. Henry Conner.

The three-day meeting, May 15-17, was held at Lockheed's Missiles and Space Division, Sunnyvale, Calif., and dealt with Lockheed's projects for the Air Force. Following the formal symposium the group toured the Western Development Laboratories.

Conference Hears FW Design Engineer

Robert E. Johnson, FW design engineer, presented a technical paper during the 20th National Annual Conference of the Society of Aeronautical Weight Engineers (SAWE), May 15-18 at Sheraton Hotel in Akron, Ohio.

"Maximum Strength-Minimum Weight and Cost—How?" was subject of the paper Johnson presented as part of a general session concerning weight control engineering problems.

F-102 FIRST TO USE 10,000-FT. ICE STRIP AT THULE AIR BASE

A Convair jet interceptor skimmed the ice as the first plane to use a frozen water runway at Thule Air Base in Greenland.

In tests to determine if ice coating North Star Bay would hold solidly under vibration of planes, an F-102 attached to 332nd Fighter-Interceptor Squadron was landed by Lt. Col. W. R. Yarbrough, squadron commander. The ice, 32 to 54-in. thick, was undisturbed on the new 10,000-ft. ice runway laid out across the frozen body of water.

In later tests similar landings were made by other types of aircraft—C-130, KC-135, B-47, B-52. In charge of the program was the Polar division of Naval Civil Engineering Laboratory, Port Hueneme, Calif.

F-102s were reassigned to the northern air base last summer with D. E. Thompson based there as Convair SD field service rep. Also on hand to view the landing tryout in minus 30-degree temperatures and high winds was R. F. Fowle, assistant supervisor in SD interceptor field service.



STEADY FLYING—F-106 based at McGuire AFB, N.J., was in air 53 hours in one month, called unofficial record. Crew from 539th FIS is, from left, 1/Lt. Leland Wolford, squadron flight test maintenance officer; T/Sgt. Hubert Grabowski, flight chief; A/2c W. C. Waech, crew chief; Col. Ralph O. Heatly, squadron commander. In cockpit is 1/Lt. Donald T. Schaeffer, who flew last flight of month. SD rep with 539th is Jim Day.

'On Their Own' Investigations Lead to $4,574 Palmdale Idea

Two Convair Palmdale men who didn't succeed the first time tried again and have come up with a solution that will save 1,430 manhours or $4,574.

L. M. Hunter and A. G. Kriesel (both Dept. 321-1) were aware that when steaming and washing paint stripper off the top of the F-106 wing (part of the modification task on the airplane) the paint stripper seeped into the trailing edge of the wing and the leading edge of the elevon, as well as other inaccessible locations.

To clean the paint stripper from these areas it was necessary to remove, replace and adjust the elevon, a procedure which consumed more than 100 manhours.

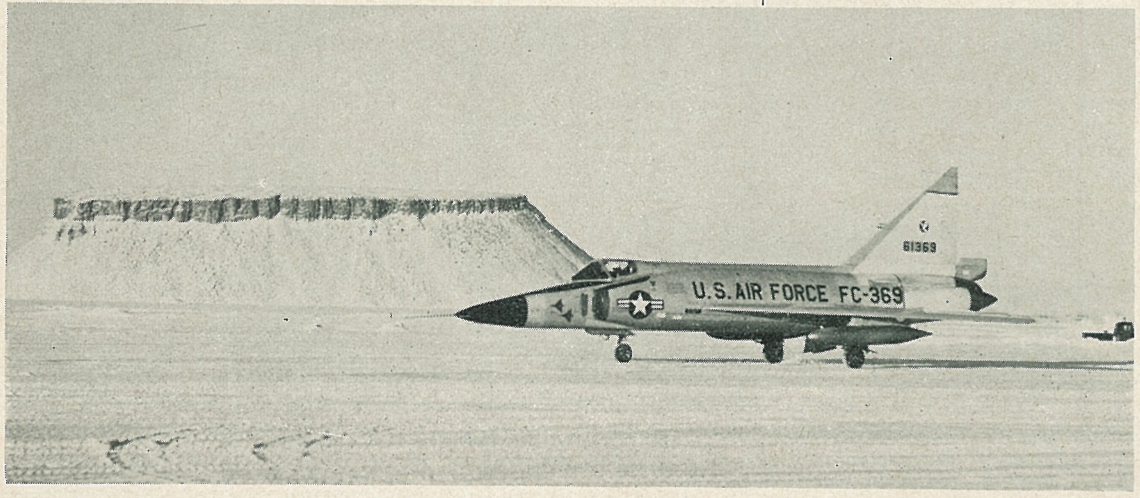
Attempts were made to solve the problem by using tape, paper, etc., but all failed to prove effective.

Hunter and Kriesel did some investigation outside the company, discovered a two-inch wide, red waterproof tape that proved the solution.

The tape-tight method will be used on a total of 15 modification F-106s at Palmdale. Hunter and Kriesel will collect $228.70 each in Employee Suggestion awards for their efforts.

Is It News?

Call Convairiety



ICY LANDING—Convair-built F-102 jet interceptor skims frozen Greenland waters in first test of 10,000-ft. ice runway at Thule Air Base.

Gottschall Named Communication Mgr.; Welty in New Post

Richard K. Gottschall, manager of public information for Convair since 1954, has been appointed manager of communication for the San Diego Division, reporting to R. C. Loomis, division manager.

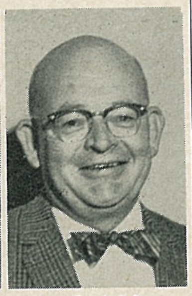
Howard O. Welty succeeds Gottschall in the information manager post, reporting to Ned Root, Convair director of communication.

The new SD division department embraces various facilities and functions relating to both external and internal communication.

Gottschall came to Convair from the San Diego Union where he was assistant city editor. Previously he was on the edito-



R. K. Gottschall



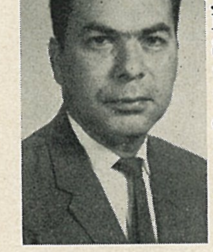
H. O. Welty

rial staff of the Salt Lake City Tribune and served in the U.S. Army from 1942 to 1946, going to inactive duty as a captain. He is a 1938 graduate of the University of Missouri.

Welty, longtime Arizona and California newsman, came to Convair Astronautics in 1957 from the San Diego Evening Tribune where he had been assistant executive news editor. He was Astro's chief of editorial section until transferring to Convair public information in Bldg. 19, San Diego. He holds degrees from University of Arizona and University of California.

AF Veteran Heads Electronic Studies

An Air Force veteran of 20 years is responsible for electronics research programs at all operating divisions of Convair.

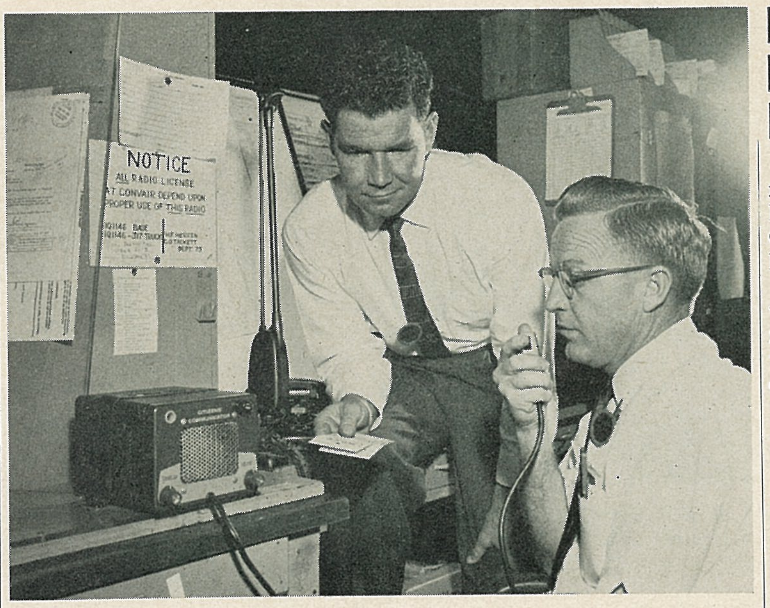


J. L. Lombardo

He is John L. Lombardo who joined General Dynamics at SD last August as assistant to vice president engineering — electronics. As such he reports to R. C. Sebold.

Most of Lombardo's service career was concentrated in the area of electronics research and development. The last post for Lt. Col. Lombardo was director of advanced systems of Command and Control Development Division, Hanscom Field, Bedford, Pa.

A native of Pennsylvania, Lombardo attended Boston University and George Washington University. He is a holder of the Bronze Star and Legion of Merit with Oak Leaf Cluster awarded during the Korean Conflict.



"RADIO CENTRAL"—C. O. Tackett, speaking into transmitter, and H. E. Herren, assistant foremen in FW Dept. 75, find recently-installed "citizens' band" radios big help in directing electronics operations.

Instant Contact

Communication Via Tiny Radios Saves Time For FW Electronics

"Citizens band" radios, recently installed in Dept. 75 (electronics) at Fort Worth have saved so many manhours they're impossible to estimate, according to C. O. Tackett, assistant foreman.

FCC licensed FW for 10 of the units two months ago. Six are in operation, and more will be installed.

The compact little sets have limited range but are fully adequate to speed up Dept. 75 operations. Formerly, if a crew running electronics tests on an aircraft needed additional equipment, they had to take time to find a telephone. Lines were often busy and there were delays. Now it's just a question of making instant radio contact.

"The system paid for itself the first week we operated it," says Tackett.

The department has two control centers. Tackett and another assistant foreman, H. E. Herren, are principal operators at the mobile testers' "radio central." J. H. Leonhart, also an assistant foreman, operates the crib operations control center.

Other sets are in a pickup, a tug, a tram, a van truck, and two are on mobile testers.

Although the so-called "citizens' band" radios are not new in principle, few have been in use in the Fort Worth area since their authorization by FCC in 1947.

Average range is eight to 10 miles between two moving vehicles. Range between vehicle and a stationary set, such as in a home or office, is 25 to 40 miles.

J. H. Fewell, general foreman in Dept. 74 (finishings) has a set in his car, and has found it enables him to be in touch with his crews on the Convair ramp even on weekends.

"I was at a family reunion in Wise County a few weekends ago," he recalled. "But I was in touch with my men all the time."

Bruce McHarg, now assistant chief of production control, was an early booster of the system for the department.

F-102s To Play Hero In Japanese Movie

F-102s will play the role of hero "to the rescue" in an upcoming science fiction thriller now being filmed for Japanese movie-goers.

The Convair jets of 40th Fighter-Interceptor Squadron at Yokota Air Base, Japan, are cast in a lead role as they go into action with a United Nations Security Force to save the world from a monstrous prehistoric caterpillar.

J. R. McMahon, Convair SD field service rep at Yokota, reports that nine F-102s were caught on film recently by Toho Movie Corporation. Planes were shot during takeoffs, landings, and limited formation.

Service Rep. Heads Anchorage Jr. C of C

Don Miller, Convair SD field service rep with F-102s based at Elmendorf AFB, Alaska, has been elected president of the Junior Chamber of Commerce at Anchorage.

Miller has been active in the Junior Chamber and served as state director during the four years he has been stationed at the Alaskan base. A native of Crookston, Minn., Miller has been with Convair SD since 1956.

Other SD field service representatives at Elmendorf are W. E. Sweat and L. A. Worley.

Dr. Harold Papazian Given Fellowship

A 12-month postdoctoral research fellowship has been awarded to Dr. Harold A. Papazian, a staff scientist of Convair Scientific Research Laboratory, by the National Academy of Sciences - National Research Council.

Papazian will leave June 1 to study with Professor P. W. M. Jacobs of the Department of Physical Chemistry at the Imperial College of Science and Technology at the University of London.

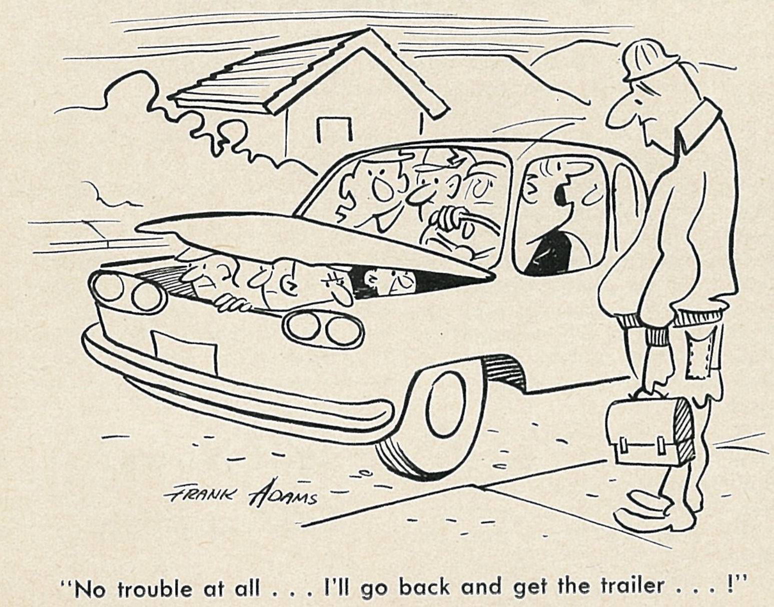
The fellowship is supported by the Air Force Office of Scientific Research for the Air Force Research Division.

$1,000 Scholarship Won by Son at FW

A Convair industrial engineer's son has been awarded a $1,000 Chance Vought college scholarship. He is Michael Jon Norton, 18, son of David Norton in FW Dept. 8.

He also won a science award for his high school, Arlington, given by the American Society of Professional Engineers.

Michael Jon will enter Arlington State College in the fall, majoring in electrical engineering and math.



"No trouble at all . . . I'll go back and get the trailer . . . !"

HIGH TEMPERATURE FACILITY TO TEST HYDRAULIC FLUIDS

A facility for testing hydraulic fluids not yet developed is the latest to go into operation in Convair SD's systems dynamics laboratory.

Looking toward the future when space vehicles may be needing extremely high temperature fluids to operate their hydraulic components and sub-systems, equipment has been designed and built at SD that can heat oil to 1,000 degrees F. So far, no fluids exist that can be used at temperatures higher than 600 degrees. (This type of fluid is now used in B-58 hydraulic systems, but at temperatures under 400 degrees. Fluids used in the F-106 take temperatures up to 275 degrees, and those in the Convair 990 to 200.)

Equipment for the research and development program is set up in test cell No. 7 in the lab's blockhouse Bldg. 79. It consists of a system of filters and pipes through which oil is pumped from a reservoir at 200 degrees through a pre-heater system and then through an electric heater, progressing to higher temperatures until it is pumped into the test component in a large stainless steel oven. It flows through the component at up to 20 gallons per minute and back out.

On the reverse path, the oil flows back through the preheater pipes, losing temperature to the incoming high pressure oil pumped to the oven in 1-inch pipes within the 4-inch preheater tubes — and back again into the reservoir at its original 200-degree temperature.

Systems dynamics research engineers developed the basic concept of the facility with SD plant engineering responsible for construction of pumping system and electric heater.

"Our research engineers, in developing the forward-looking concept were so far ahead of the present 'state of the art' that they had to search the industry for materials which would stand up under the extreme temperatures we will be using within the not-too-distant future," said John Mansfield, systems dynamics research test engineer in charge of primary controls group.

"Before we could arrive at definite specifications, we had to locate and test such components as pipes and seals suitable for over 1,000-degree heats and extreme pressures."

Pressures in the oven can simulate a range from sea level to 120,000 feet altitude.

First tests are now being done on safety relief valves designed for the Atlas missile to see if they will operate properly at high temperatures. So far, only nominal temperatures of 275 degrees have been required, said R. G. Wingfield, in charge of the Astronautics assist project. John Landis is systems dynamics lab engineer responsible for operation of the facility.



CROWNED—Pretty high school senior, Carol Lynn McLeod, 18, daughter of SD Plant 2 inspector R. J. McLeod, took title "Miss El Cajon" this month. The brown-eyed beauty will next compete for "Fairest of Fair" honors June 4 in San Diego.

Don Germeraad Navy Unit C.O.

Don Germeraad, chief engineering test pilot at San Diego, assumed duties as commanding officer of Bureau of Naval Weapons Air Reserve Training Unit (BARTU) 778 recently.

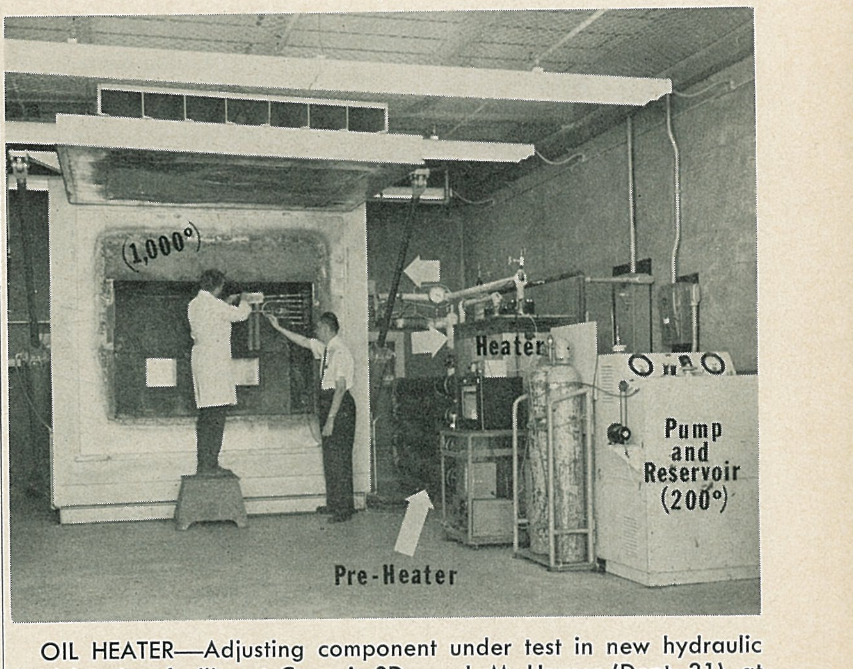
At least 21 Convair men are members of the San Diego unit —17 from Convair SD, and four from Astronautics. The BARTU program has been in existence about seven years to keep officers in readiness in an emergency for mobilization billets with Bureau of Naval Weapons activities.

One of the original members of BARTU 778 since its commissioning in 1955, Germeraad is completing his third year as executive officer. He is chief coordinator for the BARTU static display this summer and in the air show will fly one of the replicas of the first Naval aircraft, the Curtiss A-1, now under construction by San Diego IAS members.

Catalinas Still Fly In Remote Places

Of the more than 3,000 Catalina-type flying boats built, chiefly by Convair, Flight magazine lists 48 as still in service.

Concerns operating them were listed as: Alaska Coastal, two; Pacific, one; Austin, one; CPAL, one; Leaseair, one; Montreal A.S., three; Northern Wings, two; Nordair, three; Quebecair, two; Trans-Air, four; Trans-Labrador, one; Wheeler, three; World Wide Airways, three; PAB, five; Transa Chile, two; TAM (Peru), four; Flügfelag, two; Airways India, one; CAT, two; Foshing, one; Macao, one; RAI, one; World Wide Helicopters, two.



OIL HEATER—Adjusting component under test in new hydraulic fluid heating facility at Convair SD are J. M. Hauser (Dept. 31), at left, and John Landis, systems dynamics research test engineer. Note blackened interior of stainless steel oven caused by extreme 1,000-degree temperatures.

GENERAL DYNAMICS CORPORATION NEWS



AAU GOLD MEDAL—Gen. Omar Bradley, left, and Frank Pace Jr., General Dynamics chairman, shown with gold medal presented latter by Metropolitan Amateur Athletic Union for "long service to amateur athletics and record as athlete, sportsman and public servant."

Stromberg-Carlson Stereo Gift From Kennedy to Bourguiba

A Stromberg-Carlson stereo radio-phonograph was presented by President Kennedy to Habib Bourguiba when the president of the Tunisian Republic visited Washington recently.

The set, an oriental modern model of the Integrity series, was the first official chief of state gift since President Kennedy took office.

The presentation was not without challenging aspects for Felix Millecan and Sigmund Bierner, General Dynamics/Electronics engineers, who accompanied the set to Washington.

Knowing that President Bourguiba's home in Tunisia is not wired for standard 110 volt, 60 cycle current, the two engineers arranged that the set be converted to 220 volt, 50 cycle current before it was shipped to Washington.

On arriving in Washington, however, Millecan learned that President Kennedy was planning personally to demonstrate the set when it was presented. So the resourceful engineers quickly installed an adapter to handle the 110-60 current in Blair House.

The adapter was removed after President Kennedy demonstrated the set for President Bourguiba and his family. Then Millecan learned that President Bourguiba's son, who is the Tunisian ambassador to the United States, delighted with the set, had persuaded his father to let him keep it for a brief time before sending it along to Tunisia. The set was promptly reconverted to handle the standard 110-60 Washington current.

Now, GD/E engineers are keeping a 220-50 conversion kit ready for use before the set is shipped to Tunisia.

* * *

In contemplation of his approaching retirement, Lawrence B. Richardson has relinquished his duties as senior vice president-engineering of General Dynamics.

He will continue to serve the corporation as consultant and adviser on technical matters, reporting directly to General Dynamics' president, Earl D. Johnson. His headquarters will remain at the company's offices in Washington, D. C.

* * *

Electric Boat marked the 50th anniversary of its location in Groton, Conn., with a dinner for community leaders May 15.

The New London Ship and Engine Company, a subsidiary of the then Electric Boat Company, was opened as a machine shop on the banks of the Thames River in Groton May 15, 1911.

It was not until 1924 that the plant became a shipyard. As had been the case since it was established in 1899, Electric Boat then built its submarines in shipyards of other companies, including plants at Elizabethport, N. J., Quincy, Mass., San Francisco and Seattle.

The Nelseco plant built the first diesel engines ever manufactured in this country. Originally there were 90 employees at the plant; now there are more than 10,000.

In a telegram to Carleton Shugg, Electric Boat president, Frank Pace Jr. said, "Much of the success of Electric Boat's work has been due to the splendid relationship which EB has always enjoyed with the Groton-New London community."

* * *

General Dynamics/Electronics has reported what the Associated Press describes as "A new form of labor trouble." Too many employees are waiting too long to cash their pay checks.

To relieve the consequent headache for bookkeepers, the division is now marking its checks "void after 30 days."

* * *

Canadair has reported that the CL-44 swing tail cargo aircraft soon to be delivered to Flying Tigers and Seaboard & Western will weigh 1,500 pounds less than original guaranteed weights.

* * *

Electric Boat is participating in a Connecticut State Department of Labor program to help retrain unemployed workers from depressed areas in the state in order to qualify them for new jobs.

A four-week first phase of the program has started with Electric Boat instructors training a group of 38 persons from various parts of the state in welding techniques.

880 Jets Pass First Year in Airline Service

(Continued from Page 1)

cities with its nine 880 jetliners. It will expand its network to the West Coast next month when it inaugurates its Southern Transcontinental Service, connecting San Diego, Los Angeles with Dallas/Fort Worth, New Orleans, and Atlanta. One 880 will be used for one of the three flights originating daily from Atlanta.

The airline will add three more 880s to its fleet by late summer of this year.

As the first year of 880 service drew to a close, Delta 880s had established a reliability record to be proud of. Percentage of flights departing without delay now equals or betters that of jets in service many months before 880s, said L. J. Bordelon, chief of SD transport service.

"Delta officials say they are gratified by the mechanical performance of their 880s, and the increasing dependability on scheduled departures," he continued, following his return last week from Delta's headquarters at Atlanta.

The same report was brought back by R. L. Runnalls of Convair SD airline performance engineering after a 12,000-mile personal survey over Delta and Northeast Airline flights recently.

"Delta flight crews like to be assigned to 880s, knowing they can get off the ground on schedule," he said.

"Crews on both Delta and Northeast lines also echo the sentiments of TWA pilots in lauding Convair jet transports for performance and flight characteristics. And Delta, in particular, says that the traveling public is more and more enthusiastic in its acceptance of 880s. In fact, on the Atlanta to Dallas flights (Nos. 880 and 881) there are always full loads with more stand-bys waiting for 880 seats on every flight than can be accommodated."

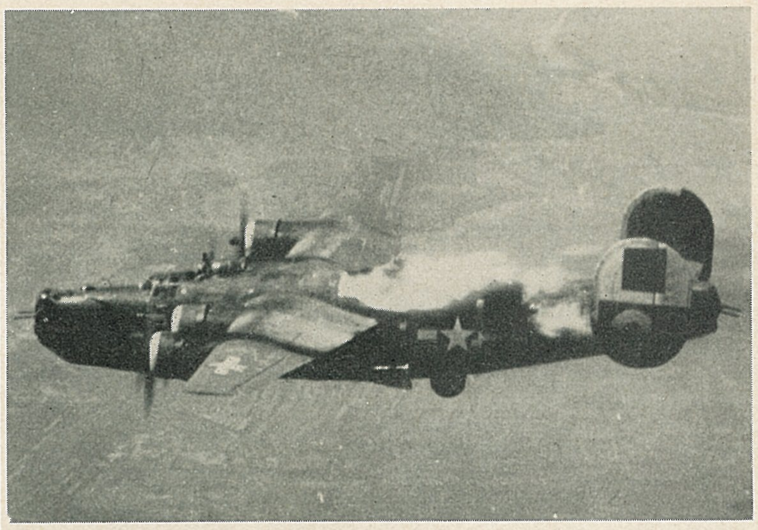
Airplane performance and engine operating data ticked off during Runnalls' stints on the flight decks of Delta 880s will go into the hopper with log sheets from each Delta flight leg in a new computer program to evaluate overall performance of Delta 880s during the year. Results will be compared with expected performance. The evaluation will provide a basis for what to expect of any 880 at the end of a year in service.

During the first year, Delta 880s had been airborne 15,667 hours, 25 minutes, flying over 8,225,000 miles. They had carried passengers over 326,000,000 revenue passenger miles with 64 per cent of seats sold.

"The large number of departures scheduled for Convair jets in service with Delta makes their reliability record even more outstanding," explained Bordelon.



ON DISPLAY—F-106 supersonic seat centers large (30x12x8 ft.) General Dynamics display shown public during Armed Forces Day May 20 at Washington, D.C. First seen at Air National Guard conference last month at Houston, Texas, it will go to other aircraft shows throughout country.



END OF THE LINE—Many B-24s didn't come back. This 15th AF Liberator was struck by German ME 109 during mission over synthetic oil refinery at Vienna. Entire crew was seen to bail out safely.

Hundreds of Pots

Blind Bombing Allied Answer To Refinery Smoke Screen

(This is installment No. 60 in Convairiety's continuing history of Convair airplanes. It winds up career of B-24s in World War II).

From mid-1944 on, the Combined Bomber Offensive gave top priority to attacks on German oil, and it is for this strategic campaign that the 15th AF is best remembered. Its prime targets were oft-bombed Ploesti, the crude refineries around Budapest and Vienna, and synthetic petroleum plants at Brüx, Oswiecim, the two Blechhammers and Odertal.

At Ploesti the Germans developed an effective defense technique—lighting hundreds of smoke pots on the approach of bombers, thus concealing the area in a blanket of dense smoke. The 15th's answer was massive blind bombing through the smoke. A total of 20 daylight attacks were made in the summer of 1944, together with night missions by RAF Wellingtons. After three large assaults in mid-August, refinery operations were brought to a complete and permanent halt. In knocking Ploesti out of the war, the 15th expended more than 13,000 tons of bombs and suffered the loss of 350 bombers.

Savage attacks on other oil targets followed. Almost 500 B-24s and B-17s were sent against refineries in Poland and Czechoslovakia Aug. 20 with loss of only four aircraft. An even larger mission on the 22nd struck such targets as the synthetic plants at Odertal and Blechhammer. On the 24th, the 15th AF teamed with the 8th in one of the largest coordinated attacks of the war, sending 600 heavies against oil targets in Czechoslovakia and western Germany, while 1,300 bombers from England hammered oil and aircraft objectives of their own.

One of the 15th's largest efforts came the first week of November against targets in Vienna. The Florisdorf refinery was pounded by 500 planes, dropping 1,100 tons of bombs. Next day the bombers returned to dump more than 400 tons on Moosbierbaum. A series of sustained operations during December halted oil production at Odertal, Pswiecim, Brüx and Blechhammer. By the end of the year only four crude oil refineries and a half dozen synthetic plants were operating in all Germany.

The 15th's last great strike against oil came March 15, 1945, when 522 Liberators and 225 Fortresses plastered Florisdorf with 1,667 tons of explosives. Now the war was almost over for the heavies. On March 21, a force of 366 Liberators carried out a classic strike against Neuburg, substantially obliterating its jet plant and airfield in a single blow. Four days later Twining's heavies bombed tank plants and airfields at Prague, in what proved to be the 15th's final strategic strike of World War II.

Engineers Serving On U. of Cal. Faculty

Four Convair engineers, one from San Diego Division and three from Astronautics, will be on the faculty of the coming University of California Extension summer session.

James B. Herreshoff, SD design specialist, will instruct a review of engineering fundamentals starting Aug. 1. W. Duane Montgomery, Astro research engineer, will teach a class in linear algebra with opening session June 26. Conway C. Sams, also a research engineer at Astro, will direct a review of calculus for people in business or industry, starting June 26; Bruno F. W. Witte, Astro senior research engineer, will teach a course in automatic digital computers beginning June 27.

Registration for summer courses is open now at the University Extension Office, 1221 Fourth Ave., SD.

Engineers Assigned To Plating Research

Two Convair FW men have been assigned to committees of the American Electroplaters Society.

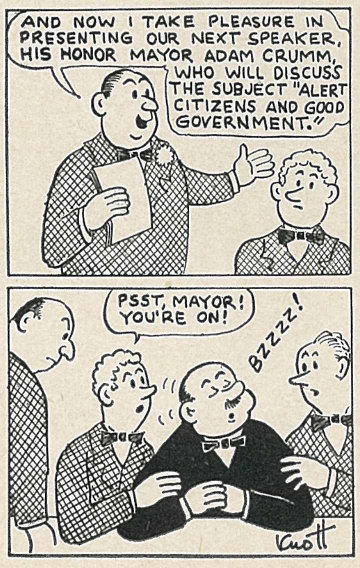
D. L. Allie, senior manufacturing research engineer, will serve as member of the public relation committee for three years; M. E. Browning, senior design engineer, will head up AES research project No. 20—plating by thermal decomposition.

The project, a $3,000 program earmarked for the Dallas-Fort Worth chapter, will be conducted at Arlington State College by R. L. Hoyle, research fellow. It will be tailored to future aircraft industry needs.

Convair to Observe Holiday on May 30

Memorial Day will be observed at all Convair facilities Tuesday (May 30).

Except for necessary maintenance and security operations, all Convair plants will be closed for the one-day legal holiday. Regular working hours will be resumed the next day, Wednesday.





ROOM TO SPARE—Bill Jones, Astro son, clears high jump bar easily practicing for state scholastic finals. Jones has done six, six, ranks as top contender. Ed Speed, another Convair son, has tossed shot 61 feet, six inches. Both are Grossmont High students.

Unbeaten Convair Sons Set For State Track and Field

Two Convair sons, unbeaten in local competition this year, will likely be top contenders when the best schoolboy track and field stars in California converge on Long Beach for the state finals June 3.

They are Ed Speed, son of Gladys (Dept. 2 SD) and John (Dept. 250 Astro) Speed, and Bill Jones, son of Astro's Lilly Jones of electronic manufacturing. They specialize in the shot-put and high jump respectively.

Grossmont High School teammates, the pair helped their school win the Metro Southern League title this year and place 32 qualifiers in the San Diego section, California Interscholastic Federation, preliminaries held over the past weekend. This coming weekend the finals will be held with winners slated for action at Long Beach.

Since both Speed and Jones have constantly beaten all local competitors with marks unequaled locally, they should move by the sectional hurdle without trouble.

Speed, a junior, established a new school shot record early this year with a heave of 61 feet, six inches, well beyond other San Diego shot marks to date. He won the Metro event with a put of 60 feet, 10 inches. A six-foot, four-inch 220 pounder, Speed is now in his second year of track competition for Grossmont.

Bill Jones, a strapping six-foot, five-incher, has topped six feet, six inches in local events. His six feet, four and five-eighths inch leap in Metro competition was more than three inches higher than the nearest schoolboy mark in other league meets locally. Jones is a senior and a sure bid to repeat all-Metro track honors he won last year at Grossmont.

Convair-Astros Break Even In Congress Softball Games

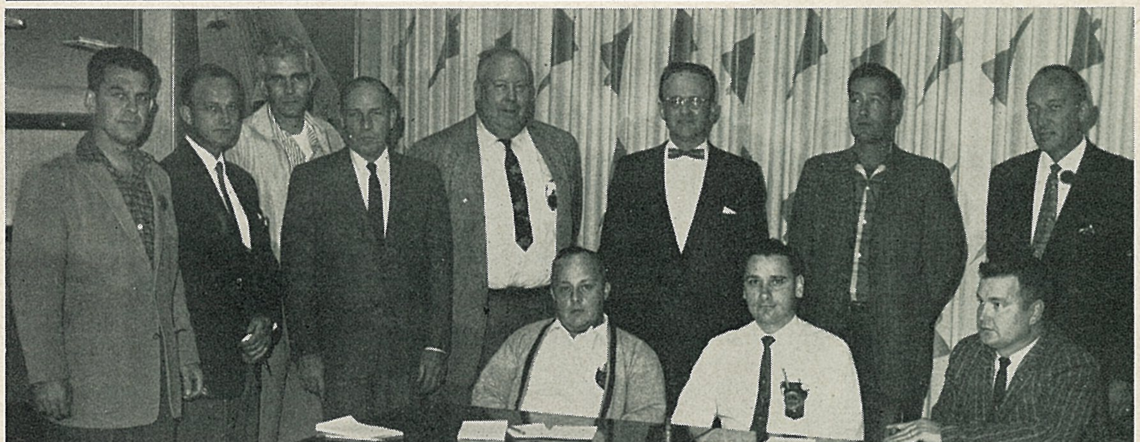
Western Softball Congress action opened this month and the Convair-Astros had an even number of ups and downs in the first four games, winning two and losing two.

The local entry took a shut-out on the chin in their opener with Lakewood going down to a 3-0 count. They bounced back to win the second league tilt with Escondido by the same score. Art Wical threw a two-hitter and Bill Doten singled to drive in two runs.

The third game developed into a 13-inning marathon with the Convair-Astros losing to Alhambra 6-5. The next Saturday, pitcher Wical grounded the Los Angeles Larks with only two hits while his teammates were fattening their batting averages with an eight-run production. Leading the attack were two-run homers by Dick Smith and Manny Gomes, the blow by the latter being of the "inside the park" variety.

The Convair nine will be hitting the road this week for tilts May 26 at Long Beach and May 28 at San Pedro. Next home game in the Congress league will be with Whittier June 3 at Helix Field.

Baseball fans interested in seeing the Convair nine in action are invited to watch them perform in the local Amateur Softball Association League. The Convair-Astros play Thursday nights at the new Astro diamond in the CRA area and Monday evenings at either Helix or National City. There is no admission charge.



AT HELM—New directors and officers of Antelope Valley Management Association (left to right) are, seated, Bill Armann, treasurer; Ed Mastaglio, president; Roy Kurtzman, vice president. Standing from left, Frank Gagnon, Cary Wirt, Frank Mortimer, Paul Scott, Walt Austin (outgoing president), Howard Pearson, Gene Speck, Tom Post. Not present, Joe Belcher, secretary.

Toastmasters Make Display

A Convair Toastmaster missile, ready for blastoff, sits in the Bldg. 5 lobby at San Diego Plant 1 as a visual advertisement for the joint SD-Astro speaking group.

Designed by Charles Willits (SD-Dept. 6), panels of the modernistically-styled missile portray various facets of Toastmaster activities. Panel pockets hold brochures, folders, and trophies. The Convair club display was on exhibit at the recent District Conference.

One of the group's members, Cy Campbell of Astro engineering, was elected to District 5 post of educational lieutenant governor.

Next meeting of Convair Toastmasters will be next Monday (May 29) in the cafeteria executive dining room starting with 6 p.m. dinner.



READY FOR LAUNCH — Ken Samples, club president, puts trophy in pocket and Charles Willits peers at keyhole design in stylized Toastmaster missile display.

Ed Mastaglio AV President

ANTELOPE VALLEY—Four ERS men will head Convair Antelope Valley Management Association for the 1961-62 term following this month's election.

Ed Mastaglio succeeds Walt Austin (Dept. 325-1) as president. He has served as vice president during the last year.

New vice president is Roy Kurtzman; treasurer, Bill Armann; and Joe Belcher, secretary. All are in Astro Dept. 575 at ERS (formerly MSTS).

Elected to the board of directors are Frank Gagnon (Dept. 321-2), Paul Scott (Dept. 329), Howard Pearson (ERS), Gene Speck (Dept. 321-1), and Tom Post (Dept. 323). They will hold office for two years, joining present directors who have one year remaining of their term; Cary Wirt (ERS), Frank Mortimer (Dept. 324), and Austin.

Installation will be held June 30 at AV Country Club.

Music, Clowns and Baseball On Tap for Convair Families

Plenty of music, clowns, candy, bubble gum, and, above all, plenty of baseball are on tap this Sunday (May 28) for members of Convair SD Management Club and their wives, sons and daughters.

Main feature of the afternoon will be the doubleheader at Westgate Park between the Padres and Salt Lake City. First game time is 1:30 p.m.

Club activities, however, will start an hour earlier with Bart Hazlett's Clown Band providing entertainment. A business meeting is planned for 1 p.m. during which results of the Management Club election will be announced.

Convair clowns will distribute free candy, gum and peanuts among the youngsters before and during the games. Reserved seating behind third base will be on a first-come-and-served basis.

Tickets for the family affair are now on sale for 50¢ each at club outlets. Members are cautioned that these reduced-price tickets will not be sold at the ball park.

Sponsored by plant engineering and applied manufacturing research, the meeting is planned and subsidized for club members and their immediate families.

General chairmen are R. T. McMurry and R. D. Marks who are backed up by committee heads C. E. Hobson, general program; A. H. Damarus, refreshments; J. R. Mackill, tickets; Ralph Ives, publicity; R. F. Missman, entertainment; and E. B. McMahon, props.

Four Events Set By CRA Gun Club During May-June

The joint Astro-San Diego CRA Gun Club will compete with South Gate Gun Club May 28 at Gillespie Field in the first of four events slated for the near future.

Shooters will fire at 50 birds from 16 to 21 yards respectively. Winning team will be determined on the basis of the 10 highest scores from each club. The event opens at 10 a.m.

Other scheduled Gillespie Field acitvities include a rifle, skeet and trap shoot with prizes for winners from 9 a.m. to noon, June 4, and an American Target Association registered shoot at 10 a.m., June 11.

A regular club meeting is planned for 7 p.m., June 13.

Young SD Dancers To Perform June 18

Several Convair children and at least one Convair SD mother will have parts in the benefit show, "Dancing for Dystrophy," at Russ Auditorium Sunday (June 18).

Betty Smith of SD Dept. 95 and her daughter, Terry, 6½, will figure in an act. Others include three daughters of George Bakich (SD-Dept. 6)—Ann Marie, 9; Mary Jo, 5; and Rose Marie, 2½. Shannon Korn, 6, daughter of Florence Korn of Astro Dept. 101, will have a dance routine.

James Carmean of Astro Dept. 331-2 at Plant 2 is instructing dancers appearing under sponsorship of Blanch-Mont Studio.

Monies collected above expenses will go to the Muscular Dystrophy Association.

Saturday Schedule For Salvage Yards

Salvage yards at Convair San Diego and Astronautics plants will be open for employee sales on the following schedule for the next four Saturdays:

SD Division—May 27, June 10.

Astro Division—June 3 and 17.

SAE Dinner Dance Planned Saturday

Annual dinner dance of Society of Automotive Engineers is slated for this Saturday night (May 27) at San Diego Club, Sixth and B, San Diego.

Tickets may be purchased at the door at $4.50 per person but reservations should be called in ahead of time to John Schroepfer, BR-7-6450, ext. 416.

A get-acquainted social hour will begin at 7 p.m. followed by buffet dinner at 8 and dancing from 9 on.

Members may call P. B. Stephens, ext. 2779, SD Plant 1, for more information.

SPARES ESTIMATING IN NEW LACATION

Spares estimating (Dept. 95-3) at Convair SD is in a new location, second floor of Bldg. 4, south end, at Plant 1. The 45 people under W. W. Whittier, spares estimating supervisor, were moved from second floor, Bldg. 8.

Six APEs Named To Keep Tighter Change Control

Six assistant project engineers (APEs) have been appointed at Convair SD to identify and maintain logs of engineering changes in an effort to achieve tighter change control.

Each APE will be responsible for certain aircraft and convey change information to tooling, manufacturing control, purchasing and installation departments. They will coordinate change activities with foremen who will be assigned to each of the model versions.

This engineering/factory mutual assist program is expected to result in closer communication techniques and expediting to assure aircraft completion to schedule, according to R. R. Hoover, chief project engineer.

In addition to maintaining a log of changes on applicable aircraft, each APE will also be conversant with changes in sufficient detail to communicate such information as is needed for various planning, scheduling and ultimate incorporation of each change.

APEs will make daily contact with design and technical groups to identify anticipated change tasks. Their change logs will include such information as change number, change category, task description, aircraft version and serial number affected, status of engineering, quantity of parts involved in each change, tool planning schedule, parts availability date, zone of aircraft affected by change, and number of hours required to accomplish change.

Assistant project engineers assigned to 880 and 880-M airplanes are B. F. Ferguson, R. W. Casebolt, Loren Hamlin, J. A. Smole. Concerned with 990 transports are P. W. Corbett, A. W. Grindle. Flight test aircraft are not included in their responsibilities.

Ferguson is coordinator for any procedural changes considered helpful.

Golf Championship Deadline on Friday

Only two days remain for employees to enter the Annual Convair Golf Club Championship to be played June 17-18, 24-25 at Flying Hills. Entry deadline is Friday (May 26).

Prospective entrants may register by calling employee services offices at San Diego (ext. 1705), Astronautics (ext. 1111), or Plant 2 (ext. 1182).

A fee of $1.50 per entry will be used exclusively for prizes. Golfers will pay individual green fees.

Water Ski Meeting To Launch Activity

Water ski activities for the summer season will be planned by all interested Convair SD skiers at tomorrow's (May 25) meeting at Gillespie Field Clubhouse.

All interested are invited to attend the 7 p.m. meeting and take part in organizing a ski schedule of outings and social events, said Gene Sevigny, club commissioner.

Arrangements have tentatively been made for a group ski the morning of Memorial Day. For information, contact Herb Wexler, commodore, ext. 2366, Plant 1.

Plant Softball League Starts

First games were played last week in the Convair SD plant softball league with Dept. 137 downing Material 11-7 and Dept. 135 edging Electronics 9-8.

Four other teams in the eight-squad league played their first tilts last Friday. They were Dept. 97, Dynamics, Rose Canyon and Dept. 400.

Games are being played Mondays and Fridays at 6:45 p.m. and 8:20 p.m. at Cabrillo Playground. Two rounds will be played with winners of the first half meeting the second-half leaders in a three-game series to decide the plant championship.

Team managers are R. J. Krause, ext. 2335, Dept. 97; Lou Figueroa, ext. 2636, Dynamics; Art Ratz, ext. 2692, (Rose Canyon), Material; Carl Price, ext. 2610, Dept. 137; Joe Lopez, ext. 2606, Dept. 135; Ron Knudsen, ext. 1996, Electronics; Gil Chavis, ext. 2081 (Rose Canyon), Rose Canyon; Don Constantino, ext. 2923, Dept. 400.

Riders Slate Alpine Event

A full day and night of outdoor life is in store for Convair SD Riding Club members during the weekend of June 3-4.

Riding fans will gather at B and W Ranch in Alpine for a Saturday night dance, overnight campout, and Sunday morning trail ride. Luke Barbour (Dept. 180), chairman, promises plenty of good food, good entertainment, and good riding. The Riding Club is picking up the tab for Saturday night refreshments and Sunday morning breakfast.

Hardy members planning to camp out Saturday night should plan to arrive at the area before dark to select their campsites, said Barbour. Reservations should be made with Barbour at ext. 2546, Plant 1, or Mattie Wescott, ext. 374, Plant 2.

Next meeting of the CRA group will be June 1, 7:30 p.m. at Gillespie Field clubhouse.

Ham Election Set For Next Meeting

Officers to direct CRA Radio Club activities during the next year will be chosen at tomorrow's (May 25) election at the group's Harbor Drive headquarters.

All Convair SD members are urged to be present to cast their votes, said Jim Lack, CRA commissioner. Meeting time is 7 p.m.

Reservations for the June 3 installation dinner are being taken now by Dorothy Oldfield, club secretary, at CY-3-7940.

Aces Become Habit For Convair Golfer

Golfer Tom Elliott (Dept. 34-1) is developing a remarkable short game if three holes-in-one in the past nine months can be used as a measure.

Last July and October he canned 110-yard tee shots at the short Presidio golf course in Old Town. Last month he found his drive in the cup on the 115-yard 14th hole.

CRA Sports & Recreation Convairiety

CRA Calendar

(Convair SD Recreation Association has some 40 activities in operation. For information on SD sports, call CRA headquarters, ext. 1245, Plant 1.)

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BADMINTON — Open play Tuesdays, 7:30 p.m., Federal Bldg., Balboa Park.

BOWLING — Tuesday afternoon and swing-shift league now forming. Call HO-9-8793.

BRIDGE CLUB — Sessions every Tuesday, 7:30 p.m., Barcelona Hotel, 326 Juniper St.

GOLF—CRA classes start June 13 and 15 at Mission Valley Country Club. Call ext. 1705, Plant 1. CRA sweeps May 27-28, Bonita course. Convair Golf Club championship June 17-18, 24-25, Flying Hills. Call ext. 1705, Plant 1, for entries before May 26.

GUN CLUB — Astro-SD vs. South Gate Gun Club May 28, CRA shoot June 4, both at Gillespie Field range.

ICE SKATING—Skating sessions each Thursday at Iceland, 6055 Murray Blvd. Special Convair rates between 6:30 and 8 p.m.

JUDO—Workouts and instruction each Thursday evening, 7-8:30 p.m., CRA Clubhouse, Pacific Hwy.

MODEL RAILROAD — Meeting June 9; "O"-scale operation May 26 and June 2 at House of Charm, Balboa Park, 7:30 p.m.

MOVIES—Reduced-price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB—Next shoot May 28, 9 a.m., San Diego Police Pistol Range, Federal Blvd. & Home Ave.

RADIO CLUB—Election of officers tomorrow (May 25), 7 p.m., Harbor Drive headquarters.

RIDING CLUB — Weekend campout, trail ride June 3-4, B and W Ranch, Alpine. Call Luke Barbour, ext. 2546, Plant 1, for reservations. Meeting June 1, 7:30 p.m., Gillespie Field Clubhouse.

ROCKHOUNDS—One-day field trip to Tick Canyon Sunday (May 28).

SWIMMING — Convair family swim night Saturday (June 3), Mission Beach Plunge, 7 to 9:30 p.m. Free tickets at SD employee services.

WATER SKI CLUB—Meeting May 25, 7 p.m., CRA Clubhouse, Gillespie Field.

Diving Queen Contest Set

A Convair beauty, Delmary Pack of San Diego Dept. 6, may wear the crown as San Diego skin diving queen if enough of her admirers cast their votes (and their pennies) before the contest's end.

The queen contest, sponsored by San Diego Council of Diving Clubs, which includes Convair SD Delta Divers, is serving a dual purpose. It is raising funds to send a San Diego diving team to this year's national meet and, not so incidentally, select the girl who will reign as queen over the coming Pacific Coast Championship Spearfishing Meet July 23.

Pictures of Delmary and other contestants are on display at diving stores throughout the area. As many votes as liked may be cast at a penny a throw.

A local contest June 18 will qualify a team for the Pacific Coast meet set for waters off La Jolla. Teams will be qualified at that event for the national meet to be held later this summer on the East Coast.



DIVING BELLE — Delta Divers at San Diego have nominated Delmary Pack (Dept. 6) as their queen. She will compete with other club beauties for privilege of reigning over Pacific Coast Diving Meet.

Hornburg Wins Tie With 'X' Accuracy At Pistol Matches

"X's" broke the tie for first-place winner of the .22 Police Course at the May 14 matches of CRA Pistol Club. Two veteran pistoleers, Ash Bishop, commissioner, and Carl Hornburg (Dept. 139), both fired 291 out of a possible 300.

Hornburg's 10 "X's" put him into top spot to win the master class; Bishop dropped to second with 5. Third place went to Jim Halfacre (Dept. 180), who was just a point behind the winning score.

Halfacre went on to take the center-fire Short National Match event with 270. Hornburg was second with 261.

Other winners at the Sunday meet were: expert class—Ralph Picard (GD/E Dept. 6), first, 278; Bill Dittmann (Dept. 6), second, 277; sharpshooter — Harvey Ingalls (Dept. 6), first, 251; marksman—Bill Mentlick, son of R. G. Lair (Dept. 401-2), first, 230; Lair, second with 227.

NEW DISNEYLAND CARDS ON HAND

New membership cards to Disneyland are now on hand at Convair SD employee services.

The new Magic Kingdom Club Gold Cards replace the green membership cards which expire May 31. They entitle holders to special ticket books on sale at Disneyland box office and membership in the Magic Kingdom Club. Members are eligible for "Family of the Month" awards.

Prices of books, which include admission to the park and tickets to 12 attractions, are: adult, \$3.75; junior (12 through 17), \$3.25; children (3 through 11), \$2.75.

Disneyland is now open every day. Beginning June 9 and continuing through Labor Day, the Park will operate from 9 a.m. to midnight daily, except Sunday when closing time will be 10 p.m.



ON THE BEACH—Rugged lines of La Jolla beach and pretty lines of model Linda Chandler proved perfect camera study for members of SD lens club at shoot April 29. Fred Barrett (Dept. 215) snapped shot of shoot.

Tickets for 16 Padre Games Offered in Baseball Drawing

Baseball fans at Convair SD have a chance at free passes to a Padres game next month at the third CRA ticket drawing of the season.

Drawing of lucky names will be June 1 at SD employee services. Entries may be dropped in boxes before 3:30 p.m. of that day. Boxes are on the counter of SD employee services, Bldg. 32, Plant 1; at Rose Canyon, in the office of Virginia Cannon, ext. 2125; at the ramp, in the office of Leonard Smith, Bldg. 37.

Complete information must be on each entry—name, clock number, shift, department number, location, plant extension. Each person is entitled to only one entry.

Tickets will be good for one of the home games between June 5 and 22. Padres meet Honolulu June 5, 6, 7, 8; Seattle, June 9, 10, 11, 13, 14; Portland, June 15, 16, 17, 18, 20, 21, 22.

Tick Canyon Trip Next on Schedule For Rock Hunters

Rockhounds at Convair San Diego will travel to Tick Canyon for a one-day field trip this Sunday (May 28).

Good specimens of howlite will be object of the search at the Antelope Valley site. Maps have been sent to all members and markers will be placed on Hwys. 6 and 138 to direct the way. Tick Canyon is located south of Palmdale and northwest of Acton.

All intending to join the outing are asked to be on location by 9 o'clock Sunday morning.

Members of the CRA group are reminded that the Rockhound Shanty across Pacific Hwy. from Plant 1 will be closed from June 20 to Sept. 11. Anyone planning to cut and polish stones for display at this summer's San Diego County Fair or other gem shows can use the equipment at the Shanty until the closing date, said Dan Whorton, CRA commissioner.

Tropical Fish Club Officers Elected

New officers of the Tropical Fish Club at Convair SD are Roger Wakefield (Dept. 288), president; Roy Richardson (Dept. 44), vice president; and Bob Martin (Dept. 406), secretary-treasurer.

Next club meeting is planned June 20 at 7:30 p.m. in the CRA Clubhouse on Pacific Hwy. It will include a door prize drawing, fish raffle, movie and short talk about tropical fish. The annual \$2 membership fee per family is payable in June.

Tickets Available For Circle Musical

Theater-goers at Convair SD have a week left to buy reduced-priced tickets to the first Broadway musical at the new Circle Arts Theatre.

Tickets to the June 4 showing of "West Side Story" will be available until May 31. Prices are: \$2.75 for \$3.40 seats; \$2.20 for \$2.75 seats; \$1.80 for \$2.25; and \$1.40 for \$1.75 seats. Reduction through CRA arrangements represents a 20 per cent saving over regular prices.

Golf Lessons Now Offered

Group golf lessons for \$10 a student will be sponsored by CRA starting June 13 and 15 at Mission Valley Country Club.

First preference for reservations will be given the 75 persons who answered an appeal for a "show of interest" in a recent issue of **Convairiety**.

A series of six lessons will be offered on both Tuesdays and Thursdays at 5 and 6 p.m. Each class will be limited to 10 students and a maximum of 80 SD golfers can be accommodated with two professionals in charge.

Time preferences will be given on a first-call-and-served basis at ext. 1705, Plant 1. In addition to the \$10 lesson charge, each student will have to foot the cost for a bucket of golf balls at each session.

Leagues in Need Of More Bowlers

SD Division keglers are needed to fill out two CRA-sponsored bowling leagues at Pacific Recreation. Beginners are welcome.

One is a swing, mixed trio league rolling Wednesday mornings at 1:30. The other, a twilight trio league, starts activity at 4:30 p.m. Tuesdays. Entries may be made by calling Mike Brooks, HO-9-8793.



'Crash Crew' Recalls Mad Dash Preceding First Atlas Firing

EDWARDS RS—A "crash crew," armed with top priority support from the then fledgling "Model 7" organization at San Diego is credited with paving the way for the first Atlas "hot" firing here five years ago.

In less than four months construction of a test stand was completed, equipment installed and checked, and the firing conducted. This was June 23, 1956, six months before the first static tests at Sycamore Canyon and almost a year prior to the first Atlas launch at Cape Canaveral.

Security was very tight in those days, W. Fenton Miller, Astro manager here at the time, recalls, and heroic efforts that went into the project were known to only a few.

"There was a lot of pressure to get the job done," Miller continued. "First we had to complete a facility under conditions and time limitations never imposed before."

To assist Miller, a 1-4 (test stand) activation project was formed under R. S. Campbell, now chief of test laboratories.

"My first view of the site was in early March. It was little more than a hole in the ground," Campbell recalled recently. "Frankly, the June 21 target for firing looked just short of impossible."

But the men rounded up by Campbell didn't know the word. They were "old pros" like Bill Pearl, Art Richards, Duke Rogers, Dick Clark, Neb Tosaya, W. R. Horning, W. H. McNabb, Lloyd Curtis, Phil Payne, Norm Langley, Al Amison, Ed Fellows.

C. D. Wirt, now chief of materials at ERS, recalls: "Campbell seemed to be eternally on the telephone, raising heck with subcontractors. I have a vivid memory of him pecking away with one finger on the TWX . . ."

That was before Anne Carlton, first woman assigned to ERS, arrived to take over TWX duties. She set up shop in a corner of the missile assembly building.

"Most of my messages were about materials and most were urgent. Parts and materials came up by special truck, and sometimes by special airplane."

V. E. Tooles, security chief here, had his troubles, too. With lights burning almost all night every night he had plenty of curious visitors to keep at a distance. And Roy Kurtzman looks back on the hours before the first firing as plain hectic. "I was making electrical connections up to the last minute before the countdown."

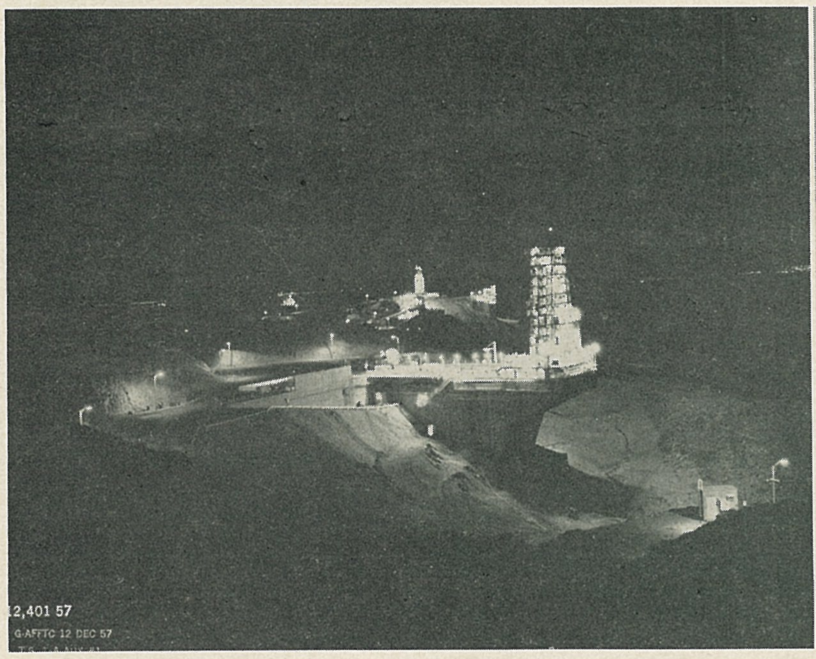
"Our planning meetings often started in early morning and lasted most of the night," Miller reminisced. "When we slept had nothing to do with night or day. We actually had to give time off for haircuts!"

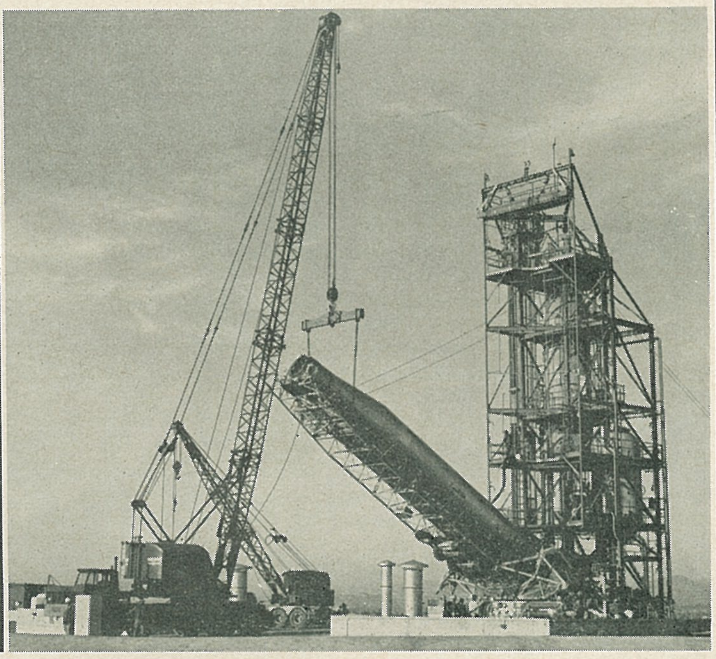
A successful LOX tanking was held on June 13 and one day before the target date, June 20, a brief firing occurred but was terminated prematurely by a malfunction.

Friday, June 22, the countdown began and was climaxed around 2 a.m. June 23 by the first hot firing ever conducted on an Atlas weapon system. It lasted 5.5 seconds.

That night there was celebrating at the Bon Aire apartments in Lancaster that lasted until daybreak. They say several were thrown into the apartment pool, clothes and all. It was quite a night . . .

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MISSILE TESTS—Night shot shows portion of Edwards Rocket Site installations with lights ablaze. In foreground is Test Stand 1-A formerly used for Atlas runs. Near center of picture is Test Stand 1-4, scene of first hot firing of an Atlas missile system five years ago next month. Astro crews at this location have conducted 163 hot firings and more than 229 other key tests.

Midget Trainer Demonstrates B-58's Flight Control System

A "pocket size" model trainer will be used to show B-58 personnel at Bunker Hill AFB how the Hustler's intricate flight control system works.

The 9½-inch-square animated projectile transparency was built especially for the Air Force as part of Mobile Training Unit No. 2.

To operate, airmen place the trainer on a transparency, or light box. They then push one of three buttons representing the three main control functions—elevator, aileron, and rudder—each of which is shown in a different color.

The trainer then traces action from point of input, through the complex power control linkage assembly, to the specified control area.

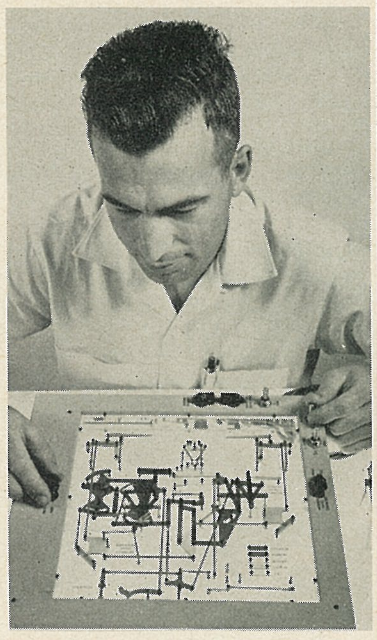
"This trainer is more sophisticated than most transparencies in that the action is animated," said R. A. Day, Fort Worth aerosystems engineer who designed the unit.

He pointed out that Monroe Robertson, Dept. 65 model maker who made the trainer, did a fine job of "miniaturization."

"Distances involved in the flight control system are about 98 feet long by 60 feet," Day said.

Previously mobile training unit of the flight control system, used by maintenance personnel, was 17 feet long and four feet wide.

"But the new trainer will be used by both Hustler crewmen and maintenance people to teach them the theory of the flight control system," Day said.



MINIATURE—Monroe Robertson, FW Dept. 65, demonstrates 9½-inch-square trainer he built for B-58 flight control system.

New Jersey Car Tag Advertises 'Fly 880'

Convair jet transports are getting bonus advertising from a set of New Jersey license plates spotted recently by a Convair SD customer service rep in the New York area.

"Fly 880" is the worthwhile legend marking the plates, reports Hank Morgan, based with 880s at Idlewild Airport, N. Y.

U. S. Bond Buyers Boosted 7,543; FW Has 66½ Pct.

More than half of the over 71,000 working for General Dynamics at San Diego, Astronautics, Pomona, Fort Worth, Daingerfield and offsite bases now are purchasing U. S. Savings Bonds through payroll deductions, following the recent bond drive.

Final tabulations showed that 38,574 are saving through bond purchases. This is an increase of 7,543 since the drive.

Astronautics was responsible for adding more than half of the new buyers, boosting its total from 8,100 to 12,500—an increase of 4,400. In addition, 1,400 increased their allotments. Several hundred cards from offsite bases are still to be counted.

Fort Worth leads all plants percentage-wise with 66.5 per cent of its 18,328 employees buying bonds regularly. Daingerfield comes next with 65.7 per cent. Pomona now totals 51.5 per cent, and San Diego, 50.8. Astronautics, in spite of its big boost in buyers, still lags behind others with 49.5 per cent.

Average size of weekly bond purchases remained unchanged at $10.62. Fort Worth's bond buyers soak away more money per week than those at any other plant—$13.57, and Pomona the least, $6.69.

First It Was ERETS, Then ERB, Now ERS

EDWARDS RS—New names are nothing new to this Mojave desert test installation.

When Astro personnel first came here five years ago it was Edwards Rocket Engine Test Site (ERETS). Then it became Edwards Rocket Base (ERB), still later Missile Static Test Site (MSTS) and now it's Edwards Rocket Site.

Anniversary of Atlas First Firing Is Near

EDWARDS RS—Five years ago next month the first "hot" firing of an Atlas weapon system took place here at Edwards Rocket Site (formerly MSTS).

Since that time Astro personnel here have logged more than 10,760 seconds of hot firings.

If used for actual Atlas launches, this total would have sent more than 30 "birds" on flights of 5,500 nautical miles each; or it could have accounted for all Atlas test flights from June, 1957 (first flight) through the end of 1959.

In addition to the 163 hot firings conducted here, there have been more than 230 other important tests on Astro weapons and space systems.

Despite these accomplishments, the facility is probably the least known of Astro-operated installations.

Employment at one time was over 600, but is about 300 now. Travis L. Maloy is operations manager. Crews man three test stands, plus support elements. A fourth test stand, once used by Astro, has been returned to the Air Force.

"Granddaddy" of them all is Test Stand 1-4, scene of the first firing. It is used primarily for engine tests. Stand 1-1, large enough to house an entire Atlas, is currently being converted to test the Astro-produced Centaur launch vehicle.

Astro's stands are located together on the edge of a high ridge overlooking Edwards AFB, Muroc dry lake and the town of Boron. Still another stand, 1-95, is part of the Astro operation. It is located over a hill on a stretch of level desert and is a "silent partner," conducting no firings but testing propellant loading functions.

Since the first firing, Astro personnel have conducted key operations on Atlas series A, B, C, D, E and F missiles, as well as MA-1, 2, 3 propulsion systems. Series F and MA-3 tests are currently in progress.

Test stand work forces vary with the job at hand. As many as 100 or as few as a dozen may man a stand at any given time.

Reporting directly to Maloy are Dan Sarokon, test conductor on 1-95 and 1-1; E. F. Mastaglio, test conductor on 1-4; R. W. Malley, flight test group engineer; C. D. Wirt, chief of materials; E. R. Millar, chief of operations support; R. L. Stanberry, chief of inspection; R. B. Merwin, chief of industrial relations; G. A. Johnson, chief of cost control.





TEST PEOPLE—Top photo shows majority of present Astro Edwards Rocket Site employees who were also on hand five years ago when first hot firing of Atlas weapons system was conducted. Lower photograph shows key Astro and Air Force personnel involved in operations of Test Stand 1-4. Fourth from left is Travis L. Maloy, Astro operations manager.

Rocket Base Alumni Widely Scattered; Many Go on to Other Astro Positions

EDWARDS RS—"Alumni" of Astro operations here are scattered throughout many Astronautics activities, a good number in key posts.

No less than 63 supervisors were drawn from the organization here for positions elsewhere. On the alumnus list are men like W. Fenton Miller, now Astro's chief engineer-test and former Astro manager at Vandenberg AFB, and K. W. Jeremiah, assistant program director for Centaur and former manager for Astro at Warren AFB.

Six former ERS supervisors hold positions as chiefs of one function or another. Eleven former ERS men are supervisors at the main plant; 18 at Vandenberg AFB; eight at Warren AFB; seven at Lincoln AFB; six at Fairchild AFB; five at Forbes AFB; four at AFMTC; two at Walker AFB; and one each at Altus and Plattsburgh AFBs.

GENERAL DYNAMICS

Published every other Wednesday
General Dynamics Corporation

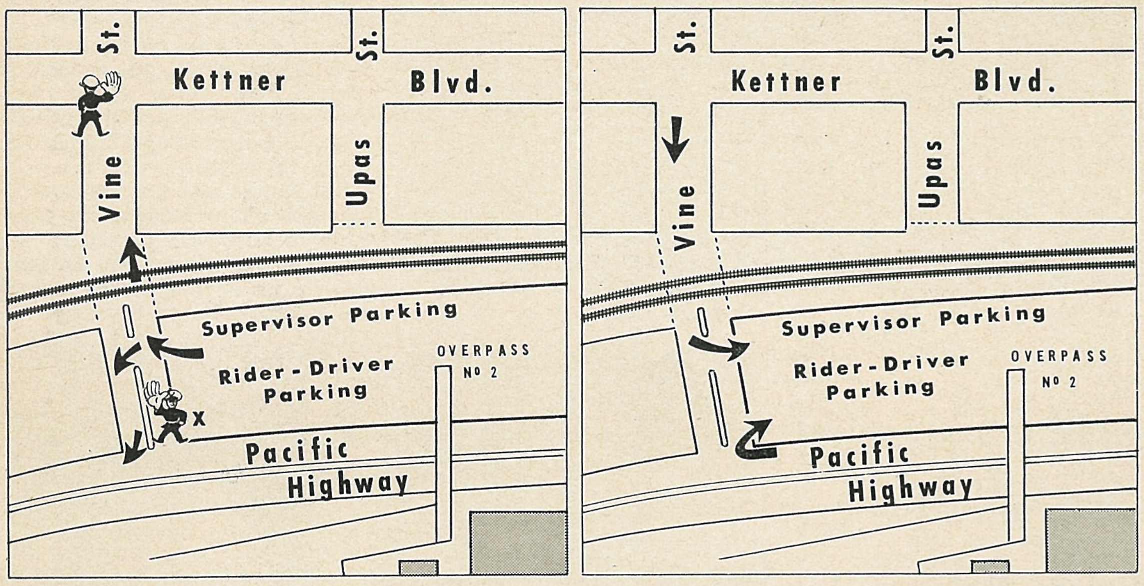
Convairiety

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San Diego
Palmdale - Holloman
EDITION

San Diego news office: Plant 1, Bldg. 32, ext. 1071.

SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. — ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.



NEW ROUTINE—Effective Monday (June 12) new system of emptying rider-driver lot at SD will go into effect. Sketch at left above shows how it will work at 3:30 p.m. until lot is cleared, after which routine will change to that of right above.

New Traffic System Set For June 12

A new method of traffic control for cars leaving and entering the rider-driver and supervisor parking lot at Pacific Highway and Vine at the 3:30 p.m. shift change goes into effect June 12.

At the end of the shift, the exit nearest Pacific will be closed and the lot will be emptied as rapidly as possible. No traffic will be permitted to turn onto Vine from Pacific or from Kettner, leaving Vine free for exiting autos.

As soon as the lot has been emptied (by 3:45 or 4 p.m.) incoming traffic will be permitted, and the gate on the Pacific side will be opened.

The new system was arranged by J. K. Field of employee services with cooperation of San Diego police and is expected to reduce pedestrian and vehicular hazards during peak traffic loads, as well as speed up traffic movement.



NO. 1—W. R. Bruce, manager of material, presents Mildred Fowler (Dept. 44) with first pendant award for topping $10,000 in savings through Employee Suggestions. Program involving pendants for women and cuff links and tie clasp sets for men went into effect in January, 1960.

BOOKS COLLECTED FOR SERVICEMEN

Save that paperback book, it may save a serviceman—or, at least, entertain him.

Convair San Diego readers may bring all their surplus paperback who-dunits to employee services, Plant 1, to be passed on to U. S. ships docking at San Diego.

The drive to provide reading material for servicemen aboard Navy ships is being sponsored by the San Diego Chapter of American Red Cross.

Three Year Counseling Precedes Retirement

A three-year company retirement planning program has gone into effect at Convair SD for the first of nearly 100 employees who will retire in 1964.

The effort is part of an expanded pre-retirement program at Convair and offers individual and group counseling starting three years in advance of retirement age of 65.

"The program is designed to help employees plan ahead to retirement and effect a successful transition," said Keith Sears of the employee services section.

During the first year particular attention is given to the changing financial situation which confronts persons upon retirement.

Each person is counseled individually how to estimate his source of income from the company retirement plan, social security, life insurance, etc. In addition an actual budget estimator is drawn up which takes into account different retirement requirements in the way of food, housing, clothing.

Following next are a series of group lectures on social security which feature talks on the topic by experts. They started last Monday for the first group of potential retirees.

Finances will continue to be the top topic later this year when stock and bond, insurance and real estate brokers lecture on their specialties.

During the second year of the retirement planning program the emphasis will shift to the area of health and those who wish will be given a free medical examination.

During the third year, and possibly sooner, the program will emphasize the importance of proper use of leisure time and the necessity to adjust patterns and habits.

SD persons, other than potential retirees, interested in attending the present sessions on social security and later on stocks and bonds, real estate, and insurance may call ext. 1705, Plant 1, for information.

IN-PLANT CLASSES START IN JULY

Registration is open at SD educational services for summer classes due to start in-plant the first week in July.

Supplementary classes, which will run for nine weeks, will offer Blueprint Reading, basic and advanced; Shop Math; Basic Electricity; Basic Electronics; and Technical Writing for day-shift students at Plant 1.

Night-shift courses will be in Blueprint Reading, Shop Math, and Basic Electricity.

All classes will be set for off-work hours two days a week. Day-shift hours will be 4-7 p.m.; night-shift, 12-3 p.m.

Enrollment forms are on hand at educational services office, Bldg. 15, Plant 1. For further information Lee Woll, coordinator, may be contacted at ext. 491, Plant 1.

880 Color Photos Go On Sale, Plant 1

Long-awaited color pictures of the Convair 880 jet transport are now on sale at employee services, Bldg. 32, Plant 1.

The 16x20-in. prints will sell for 25 cents each, including tax.



READY TO GO—Civil Air Transport's "Mandarin Jet" is shown on Convair flight line. Acceptance of aircraft is expected this week. In cockpit is Capt. W. D. Bigony of CAT.

Dynamics Names Div. Presidents And Corporate Vp.

General Dynamics last week appointed four division presidents and a corporate vice president-industrial relations, as well as corporate directors of government accounting, contracts, and materiel.

The division presidents are J. R. Dempsey of General Dynamics/Astronautics; Charles F. Horne of General Dynamics/Pomona; Frank W. Davis of General Dynamics/Fort Worth; and Robert C. Loomis of General Dynamics/Convair (formerly the San Diego division).

The four also were named senior corporate vice presidents.

R. H. Biron, formerly Convair vice president-administration, has been promoted to General Dynamics vice president for industrial relations. As such he will have overall responsibility for industrial relations functions at all Dynamics divisions.



J. R. Dempsey



F. W. Davis



C. F. Horne



R. C. Loomis

Also promoted to corporate-wide responsibilities are Roy R. Brewton as director of government accounting; Chester L. Meador as director of contracts; and Stanley E. G. Hillman, director of materiel.

Dempsey, Horne, Davis and Loomis report to C. Rhoades MacBride, General Dynamics executive vice president in charge of the western group of Dynamics divisions with headquarters at San Diego. Also in the western group is General Atomic Division where Dr. Frederic de Hoffmann continues as president of the division as well as a senior vice president of General Dynamics.

Dempsey, who has directed the Atlas missile program since 1954, is a native of Red Bay, Ala., was educated at the University of Alabama, the U. S. Military Academy and the University of Michigan. He was a World War II P-38 pilot and during post-war service was chief of all guided missile projects in the Research and Development Directorate, AF.

Horne, who has managed the Pomona facility since 1953, was a 1926 Naval Academy graduate and later earned a master of science degree at Harvard. He had a long and distinguished Navy career, retiring as a rear admiral. He was administrator for the Civil Aeronautics Administration during 1951 and 1952, and later was an aviation and electronics consultant to major companies.

Davis, a graduate of California Institute of Technology and a Marine pilot, joined Vultee Field Division in 1940 as a test pilot. He held many top posts in engineering at San Diego (where he was closely associated with delta wing development) before being named chief engineer at FW (1954) and division manager in early 1959.

Loomis was educated at the University of California, Berkeley, and was a Navy flyer, and later a petroleum research engineer for Standard Oil. He joined TWA in 1940 (where he ultimately became director of engineering) and joined Convair at San Diego in 1948 in executive posts in flight test and inspection. He transferred to Pomona in 1953 and was assistant manager when appointed to head the San Diego plants in 1960.

Biron, a native of Minneapolis, Minn., received his bachelor of arts and bachelor of laws degrees from University of Minnesota. He headed legal and industrial relations departments for Minneapolis-Honeywell before first joining Convair in 1943 as director of labor relations. Two years later he joined Northrop as vice president-industrial relations and in 1946 accepted a similar post in TWA. He returned to Convair in 1948 as vice president.



R. H. Biron

Brewton, a graduate of University of Texas, entered the aircraft industry in 1941 with Vultee Aircraft and later was director of general accounting for Consolidated Vultee and still later Convair Division of General Dynamics. He was made controller of Convair in 1956.

Meador, a Missourian, joined Consolidated in 1940, served in estimating at Fort Worth in 1942 and after Army service was assigned to contracts at San Diego. He shifted to Convair General Office in 1953 and was Convair director of contracts until his new appointment.



C. L. Meador



R. R. Brewton

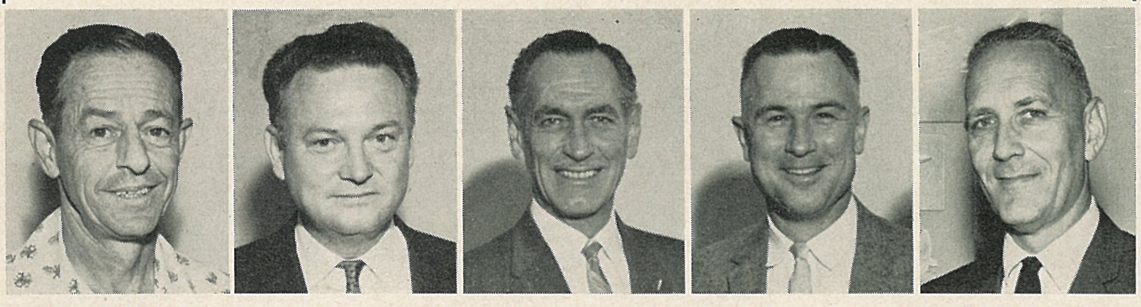


S. E. G. Hillman

Hillman is a native of London, England, and was in business in the Orient for a number of years before coming to the U. S. He first joined Convair at Fort Worth and was manager of material there when transferred to San Diego in 1960 as director of procurement and material.

Last week's appointments were the first personnel announcements since dissolution of Convair General Office and creation of the new western divisions.

Log Book Entries



VETERANS—Receiving 25-year service emblems recently at Convair are, from left, N. F. LaGamma, Dept. 25-6; C. L. Hibert, Dept. 6; G. J. Friel, Dept. 201; J. R. Benedict, Dept. 120-0; R. I. Morse, Dept. 1-31.

Service Emblems

SAN DIEGO

Service emblems due during the period June 1 through June 15.

Thirty-year: Dept. 1-65, A. W. Abels.

Twenty-five-year: Dept. 1-32, Grayce H. Fath; Dept. 31, A. B. Oberg; Dept. 120, G. W. Christian; Dept. 400, C. S. Wills.

Twenty-year: Dept. 6, W. A. Hietzman, Edward Witek; Dept. 21, J. S. Fisher; Dept. 31, S. B. Ames, H. S. Boyd, C. J. Cole, W. J. Durflinger, G. C. Haas; Dept. 101, Philip Eramo; Dept. 135, G. B. Nokes; Dept. 136, J. L. White; Dept. 141, W. J. Sherman; Dept. 148, Eugene Catton; Dept. 171, O. C. Western; Dept. 188, J. M. Wallace; Dept. 192, H. C. Hoskins; Dept. 292, L. C. Cole; Dept. 400, H. W. Moreno; Dept. 401, C. H. Jones, C. R. Nichols.

Fifteen-year: Dept. 6, H. H. Rosenbaum; Dept. 25, D. H. Newton; Dept. 91, Clive Henrie; Dept. 129, Margaret M. Hart; Dept. 145, Peter Messer; Dept. 188, J. C. McCollum, W. R. Reffett; Dept. 190, J. A. Lederer; Dept. 400, D. J. Campbell, William Ewert; Dept. 401, H. W. Coyle.

Ten-year: Dept. 1-16, W. H. Dorrance; Dept. 1-31, J. E. Long; Dept. 3, H. R. Munden; Dept. 6, Charlotte C. Addesso, W. K. Hartman, R. L. Hayward, Bett D. Heide, R. J. Hollister, R. B. Penneman, J. C. Preston, John Strachan, Richard Teller, R. H. Thatcher.

Dept. 14, Ima D. Lowers, J. L. Monteiro; Dept. 25, H. W. Clark, A. J. Rehberger; Dept. 31, Myrtle O. Northup; Dept. 34, M. M. George; Dept. 44, J. A. Pfeiffer, Margaret D. Spinning; Dept. 69, D. P. Cumming; Dept. 91, Estelle C. Hale; Dept. 95, R. D. Evans.

Dept. 115, Charles Nielsen; Dept. 116, Virginia S. Newlin; Dept. 120, Lulu T. Wheelock; Dept. 128, Mary S. Huston, Ruby L. Mortensen; Dept. 129, V. R. Barnhart; Dept. 133, Mary G. Sare; Dept. 139, Ruby G. Timms; Dept. 146, F. B. Pusag; Dept. 188, H. B. Root; Dept. 192, H. P. Ruth; Dept. 197, J. T. Mahan; Dept. 218, Alicia N. Garcia, R. C. Hughes, Ruth G. LaMadrid, Elnora J. Lucas.

Dept. 223, G. J. Boyle, E. E. Florez, D. J. Henderson; Dept. 288, R. L. Daffin, Mary C. Woodard; Dept. 400, Katherine S. Ritzinger; Dept. 401, L. M. Lindsey, T. R. McDaniel, Barbara K. Miles, W. L. Roughcore, G. K. Shakespeare.

GD/ELECTRONICS

Ten-year: Dept. 5, David Proctor; Dept. 6, W. J. Squance; Dept. 7, J. E. Critchett.

Personals

SAN DIEGO

I wish to thank all of my friends at Convair San Diego for the many expressions of sympathy, cards, and flowers received during my recent bereavement.

Mildred G. Quillan, Dept. 116, second shift.

* * *

I deeply appreciate the kind expressions of sympathy shown at the loss of my husband, Mabre M. Harben, Dept. 188-3.

Mary H. Harben.

Promotions

SAN DIEGO

Promotions to or within supervision effective May 22.

Dept. 6, Engineering: To chief electronics design engineer, W. R. Monroe. To chief of environmental analysis, R. A. Nau. To chief of propulsion design, F. A. Stephenson. To chief of thermodynamics, E. O. A. Naumann. To installations group engineer, R. R. Wahler.

Dept. 129, Trim: To asst. foreman, D. J. Richard.

Dept. 139, Jet Transport Aft Fuselage Primary: To asst. foreman, R. T. Renfro.

Dept. 141-1, Jet Transport Delivery Preparation: To foreman, V. C. Breit, D. G. Williams.

Dept. 145, Jet Transport Wing Structure: To asst. foreman, L. P. Smith.

Dept. 146, Jet Transport Wing Primary & Wing Mate: To asst. foreman, E. W. Ferrin, W. S. Fowler, W. J. Wilson, A. J. Winner.

Dept. 148, Jet Transport Major Mate: To asst. foreman, R. J. Krell, C. T. McNeese.

Dept. 160, Jet Transport Final Assembly: To asst. foreman, F. O. Fernandez, D. C. Olson, C. F. Price.

Dept. 180, Proofing Mock-Up: To asst. foreman, T. Avant, H. W. Leyva, G. R. Simpson.

Dept. 188-3, Inspection, Plant 1: To inspection supervisor, B. E. Mundt.

Dept. 190-5, Applied Manufacturing Research, Operating Controls, and Methods: To factory methods supervisor, C. E. Hobson.

Dept. 192-4, Manufacturing Control Plant 1. To M/C asst. foreman, A. A. Broderick Jr., P. R. Manos.

Dept. 218, Subassembly: To asst. foreman, R. L. Long.

Dept. 292-8, Manufacturing Control, Plant 2. To M/C asst. foreman, J. W. Andrews.

EDWARDS AFB

Dept. 318-1, Jet Transport Flight Test Operations: To flight test supervisor-EAFB, F. Goodrich.

PALMDALE

Dept. 328-0, Inspection: To chief of inspection-Palmdale, C. W. Derrick.

Births

SAN DIEGO

BETTINGER—Son, Peter Allen, 9 lbs., 12 oz., born May 25 to Mr. and Mrs. Fred J. Bettinger, Dept. 1-32.

HORNE—Son, Charles E. III, 6 lbs., 10 oz., born May 10 to Mr. and Mrs. Charles E. Horne, Dept. 25-2.

Deaths

SAN DIEGO

RADENHEIMER — Harold C., Dept. 14-4. Died May 21. Survived by wife, Edna M.; daughter, Lois; son, Paul; three brothers; three sisters; three grandchildren.

WEIR—Irene, Dept. 95. Died May 22. Survived by daughter, Mrs. Gloria Lowe, and brother, Nelson Colville of Canada.

Retirements

SAN DIEGO

MOELLER—Earl L., Dept. 120. Seniority date Sept. 3, 1947, retirement effective May 31, 1961.

SNYDER—Orson J., Dept. 91-8. Seniority date Sept. 7, 1949, retirement effective May 19, 1961.

TYLER—Archibald L., Dept. 6-21. Seniority date March 25, 1941, retirement effective May 26, 1961.

WILLIAMS—Laura E., Dept. 115. Seniority date May 24, 1951, retirement effective May 31, 1961.

WILSON—Melva I., Dept. 216. Seniority date March 22, 1951, retirement effective March 29, 1961.

College Professor Will Teach Course About Heat Transfer

Design engineers at Convair San Diego may enroll now in an upcoming class on aerodynamic heating and heat transfer to be taught in the plant this summer.

Charles Morgan, professor of mechanical engineering at San Diego State College, will instruct two sections weekly. One will be held Tuesdays, starting June 20 and ending Aug. 22; the other, Wednesdays from June 21 to Aug. 23, both from 4:30-6:30 p.m. Both will be located in Room 377, Bldg. 51, Plant 1.

Enrollment may be made by contacting L. J. Goldsmith of SD educational services, Room 378, Bldg. 51, ext. 1827. Number of students accepted will be limited by classroom capacity. No textbooks will be required.

Subject material will deal with surface temperatures due to aerodynamic heating and heat transfer and temperature distribution in high speed objects.

Naumann Now Chief Of Thermodynamics

Dr. Erwin Naumann has been named chief of thermodynamics at San Diego, effective May 22, announced W. W. Fox, chief engineer.

Dr. Naumann replaces C. E. Chapman, now on leave of absence due to illness. Chapman had headed thermodynamics activities at SD as chief since 1955.

A native of Dessau, Germany, Dr. Naumann holds degrees of M.A. in mechanical engineering and Ph.D., specializing in aeronautical engineering, from Muenchen Institute of Technology. Since coming to the U. S. in 1946 he spent ten years at Wright-Patterson, Ohio, first as scientist, and later as physicist with WADC Equipment Laboratory. Before joining Convair in 1960 as engineering staff specialist he was chief of advanced studies at Solar Aircraft Co. for four years.



FIRST BRIEFING—Twenty-seven Convair men and women hear George Miller, assistant manager SD district office of Social Security Administration, outline program at first pre-retirement session. Meetings continue weekly through July 31.

★ Convairiety ★

Founded Sept. 1, 1948. Published in six editions (Fort Worth-Daingerfield, San Diego-Palmdale-Holloman, Astronautics, Astronautics Off-Site, Pomona and the Mail). Logan Jenkins, editor-in-chief.

Approximate current total circulation, over 70,000. News items and letters to the editor are solicited, but no advertising can be accepted.

SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Fred Bettinger, news editor; Grayce Fath, Helen Pemberton.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, Convair, Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.

CRA Reserves Block Of 'Pal Joey' Seats

Tomorrow morning at 9 a.m. will be kick-off time for sale of discount tickets to the next Circle Arts Theatre musical comedy.

A block of seats to "Pal Joey" has been reserved by CRA for Convair SD people on the night of June 18.

Reduced-price rates are $2.75, $2.20, $1.80, and $1.40. These prices represent a 20 per cent reduction from regular prices.

Tickets will be available at Convair SD employee services, Plant 1.

Roy Dill Elected President Of Convair Management Club

Roy W. Dill of long range planning will succeed L. G. Lawson as president of Convair San Diego Management Club for the 1961-62 term.

Other new officers voted in by 1,383 club members who cast ballots are E. R. Fink (Dept. 25), first vice president; C. L. Ambler (Dept. 3), second vice president; E. V. Laird (Dept. 190), recording secretary; R. M. Montgomery (Dept. 21), treasurer; and W. J. Wood (Dept. 6), financial secretary.

Election winners were announced by B. J. Wood, chairman of the nomination committee, at the May 28 meeting at Westgate Park. Installation will take place at the June meeting.

Chosen for one-year posts on the board of control were the following four: J. Freeman (Dept. 4), J. A. Gliebe (Dept. 249), H. Lund (Dept. 190), A. M. Van Horne (Dept. 400).

Two-year board positions will be filled by W. M. Basile (Dept. 160), C. H. Hahn (Dept. 8). Three-year board members will be A. B. Oberg (Dept. 31), B. H. White (Dept. 6).

Dill will be assuming the club's top post after filling a one-year term as first vice president. A club member since 1952, he has also served as financial secretary and treasurer.



NEW TEAM—L. G. Lawson (at right), outgoing Convair Management Club head, says "good luck" to incoming president, Roy W. Dill, as other new officers approve. On stairs (from bottom) are E. R. Fink, C. L. Ambler, E. V. Laird, Ralph Montgomery, W. J. Wood, and board members J. A. Gliebe, C. H. Hahn, A. M. Van Horne, H. Lund, W. M. Basile. Board members J. Freeman, A. B. Oberg, B. H. White not present.

Star-Light Tickets On Sale at Bargain

Discount tickets will be offered to all Star-Light Opera productions during the coming season by CRA.

A block of 200 seats at reduced price of $2.45 for $3.50 locations has been obtained for one Convair night at each of the five musicals. Showing this year will be "Destry Rides Again," "The Red Mill," "Annie Get Your Gun," "The Chocolate Soldier," and "Flower Drum Song."

Tickets to the July 9 performance of "Destry Rides Again," will go on sale at employee services June 22.

Radio Hams Elect L. D. Rush President

L. D. Rush will head ham activities at Convair as president of the Radio Club following May 25 election.

Other officers installed at June 3 ceremonies at King's Inn were Don Bain, WV6MRE, vice president; Dorothy Oldfield, WV6-MQZ, secretary; and L. H. Stevenson, WV6PBO, treasurer. Rush's call letters are K6QXN.

Next meeting will be tomorrow (June 8) at the Harbor Drive headquarters.

Full Donor Signup For Blood Requested At June Collection

First collection of blood for credit of General Dynamics/Convair and General Dynamics/Electronics in two months at San Diego is slated for June 22, Ken Wulfemeyer, employee services, reported.

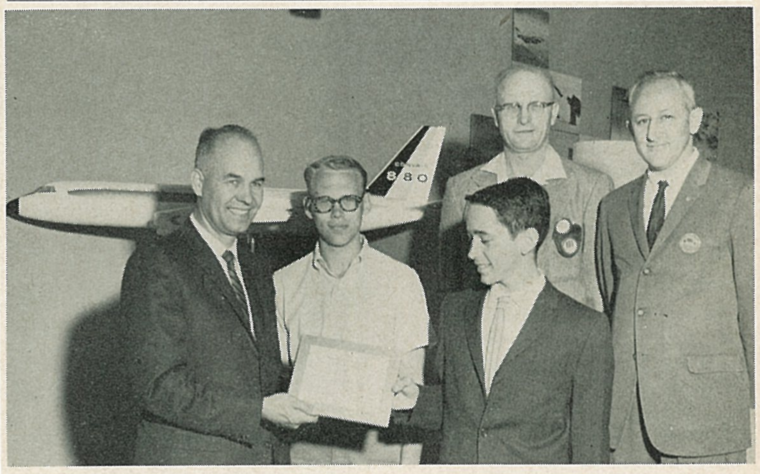
Cards will be in the hands of all department heads of engineering, experimental, and GD/E by next Monday (June 12) for sign up of donors.

Since the supply of blood available to employees and their families is running low, Wulfemeyer urges a full turnout of volunteers. He hopes for a collection of at least 150 pints.

Family Photo Found; Now Awaits Owner

Some Convair person may be missing a family photo from his wallet.

A plastic-enclosed snapshot of three girls was picked up by J. P. James (Dept. 192)) last week on the east side of Overpass 1, Plant 1. It is now at lost and found in employee services, waiting for its owner.



MERIT SCHOLARS—R. C. Loomis, Convair Division president, shows Convair SD sons, Clifford Meland and Paul Langlois, certificate award they will receive for winning General Dynamics scholarships, ranging from $1,000 to $6,000 over four years. In rear are fathers, Lloyd Meland (Dept. 101) and A. P. Langlois (Dept. 190-2).

Prop-Jet 440s Successful

Convair 440s converted to Allison prop-jet power by Allison Division of General Motors Corp. are exceeding performance guarantees by a wide margin, according to present operators.

Thirteen of the modernized Convair transports are being used by domestic companies. Five others will be placed in service later this year by Federal Aviation Agency to monitor intermediate attitude navigational systems throughout the country.

Two of the converted transports, owned by Union Oil Co. of California, are outperforming piston-powered versions at lower fuel cost, reports the AllisoNews, General Motors house publication. Allison Convairs can make a 2,500-mile flight in 2 hrs., 40 min. less than a piston-powered Convair with a fuel cost reduction of 11 cents a mile.

Allison Convairs require only 3,000-ft. runway for takeoff at 45,000 pounds gross weight, compared to requirement of 4,175 feet for similar piston-powered craft. Actual cruise air speed is proving to top 350 mph.

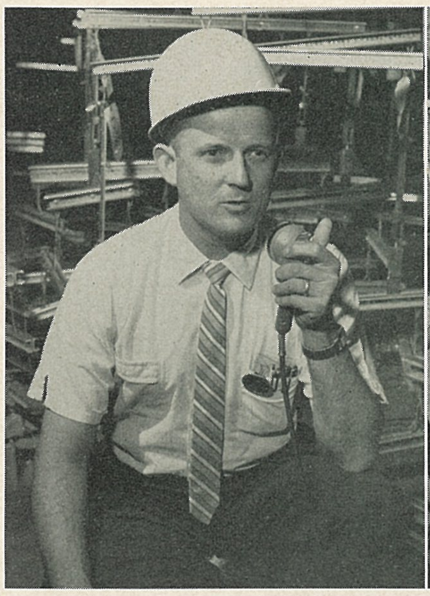
Astronautics Names Price Analysis Chief

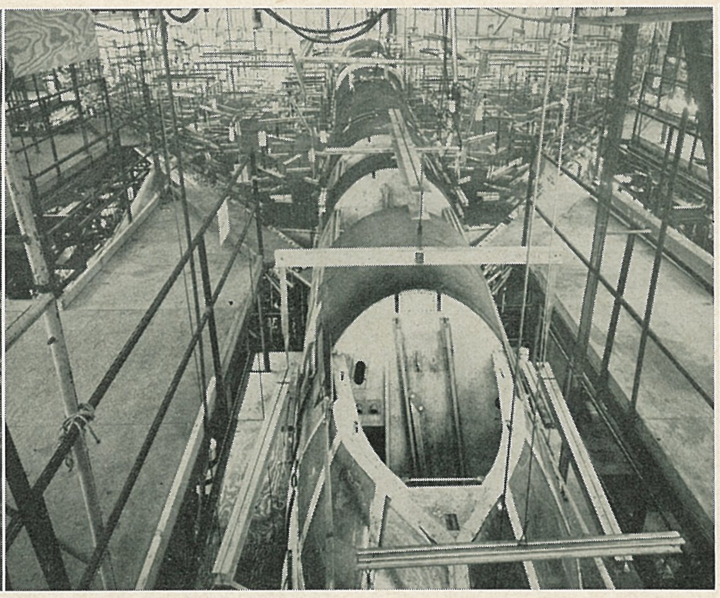
Raymond H. Quinn has been named Astronautics' chief of material price analysis by S. A. Falk, material cost manager.

In his new post, Quinn is responsible for price evaluation and analysis of vendor cost proposals.

A native of Cambridge, Mass., Quinn is a business administration graduate of Northeastern University and attended Bentley College, Boston. Before joining Astronautics he was manager of budgets and reports for Gillette Safety Razor Co., Boston.

He relieves J. S. Blakely who will assume new duties as chief of activation cost analysis (Dept. 602).





HARD LIFE—At right B-58 is in center of maze of whiffletrees exerting strains of violent flight. At left is H. D. Nolan, group engineer, who monitors test progress and reports conditions by tape recording.

Hangar Flying Hustler Undergoes Stress Equaling Five Years in Air

Hustler No. 29 has been "flying" for five years in all kinds of "weather" without developing a serious structural flaw.

A proud record indeed for an airplane that has done all its flying on the ground as a test craft.

All flights, in fact, have been made in a giant steel frame in the development hangar, and the weather has been provided by a series of whiffletree loads exerted over the entire plane.

It's all part of extensive fatigue tests which are being run to confirm the Mach 2 bomber's structural integrity.

Since the tests were begun last year, the Hustler has put in the equivalent of five years flying time, using SAC information as a basis for the computation.

And the tail has already withstood even more stress and strain —equivalent to over 10 years of flight time.

"Loads are applied at various levels, depending on the nature of the airplane section," said H. D. Nolan, group engineer in charge of testing.

"In any one flight, or ground condition, we routinely run a series of normal loads. A smaller number of load cycles are then applied at maximum or extreme load conditions."

Loads simulate virtually every situation—vertical gust, nacelle gust, maneuvers, ground turning, and elevon.

Even taxi stresses are simulated, since as much as three G loads can be produced by a Hustler running over a "bump" or sizable crack in the runway.

When No. 29 isn't "in flight," the loads are kept at "zero."

Nolan pointed out that the Hustler's rugged delta wing is proving virtually "fail-safe."

"The added load of a slight spar failure is redistributed over many paths, since there are so many more spars in a B-58 wing than in a conventional wing," he said.

Tests continue on durable No. 29, which should "fly" longer than any other Hustler before it completes its ordeal.

Landing Shock Reproduced in Lengthy Tests

Calibration of F-106 landing gear is nearing completion in Convair San Diego's high temperature structural test laboratory at the seaplane ramp.

During the last year two main and one nose landing gear have undergone calibration to record actual landing loads. The calibrated gear will go onto plane No. 56-455 for a flight test program at Holloman AFB, N. M., later this summer. Information gathered in flight there will be used by the Air Force to develop landing gear design criteria for future craft or modification of present planes.

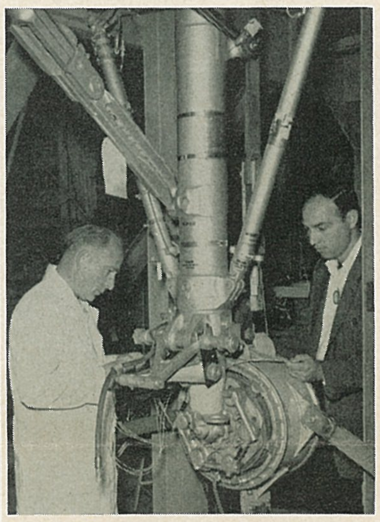
In the gust and flight load program at SD all of the five forces affecting gear during landing were applied by hydraulically-controlled horizontal and vertical steel straps. It took months to find the optimal locations for strain gauges on the inner shock strut and axle to best measure force applied at any one time in different directions, said A. T. Green, Dept. 68 engineer in charge of the calibration.

Combination of all possible loads were run in series of 20s, over and over, during the past months. Forces are applied from zero to design limit to find just where strain occurs from each force.

Forces at landing, which go from impact of tire up through the landing gear structure to the wing, are: vertical, upward through center of gear; side, through rolling radius of the tire either inboard or outboard; and drag force, through center line of wheel, forward or aft.

Direction of loads is often difficult to distinguish since some of the forces produce the same type of stress at the same location, said Green.

An actual F-106 brake and wheel assembly, minus tire, was used throughout the main landing gear calibration which will conclude the entire program by the end of June.



LOADED GEAR—Don Moore, Dept. 68 technician, and Al Green, Dept. 68 project engineer, adjust wiring of strain gauges measuring landing loads on F-106 main landing gear assembly at Convair SD structures lab.

B-58 Capsule Ejection Test Data Will Be 'Wired' Edwards to FW

Flight data will be sent over a telephone wire between Edwards AFB and Fort Worth this summer in an attempt to keep the B-58 escape capsule ejection program running smoothly and on schedule.

Hustler No. 2 will conduct a series of capsule ejections from the California base starting this month and lasting about eight months.

The data-giving tapes will be removed from No. 2 following flights. Data will be transferred immediately to IBM cards, using punch-card transmittal equipment.

Data on the IBM cards will then be sent over telephone wires to specially leased equipment at Fort Worth, where the information is received on IBM cards. The cards are then programed into Fort Worth's 704 computer, which produces the data in usable form.

Thus, shortly after each flight, Fort Worth engineers will have in hand flight data on which future decisions can be made.

Special equipment used at Fort Worth for the operation are: Model 66 data transceiver; IBM Model 68 signal conversion unit; IBM tie-in with telephone company's digital sub-set; and a telephone digital sub-set.

Short-term lease of this equipment will enable Fort Worth to tie in the identical system at Edwards.

"Otherwise, we'd have had to either teletype all the data on a number of special wires—or send it back by plane," said A. A. Norman, group engineer.

"The proposed method will be quicker and considerably cheaper."

He added: "The ability to get virtually instantaneous results from these tests will assist engineers in analyzing the program as it moves along."

Alaska Airlines Crew Trains At SD in 880-M Maintenance

Maintenance men who will be working with Alaska Airlines' Convair 880-M when it goes into service over Northland routes have completed four weeks training at San Diego.

Seven from Fairbanks and Anchorage took courses to familiarize them with all areas of the 880-M jet transport in customer service training. Alaska Airlines will take delivery on a modified 880 in mid-July. It will go into passenger service from the Seattle main base to Alaska.

At San Diego during the month of May for maintenance courses were John J. Huber, crew chief; Robert L. Hoffman, inspector; Marvin F. Van Buren, inspector; and Walter G. Krotke, master specialist, all from Anchorage. From Fairbanks were Sylvester Stadulis, lead mechanic; Boyd J. Blair and Rodney C. Jacobson, mechanics. Paul Philp (Dept. 15-4) acted as SD coordinator of the group during their stay at the San Diego plant.

For their entertainment while they were in Southern California, information and discount tickets to such attractions as Disneyland, Marineland, and Padre baseball games were supplied by Convair Recreation Association.

First Alaska Airlines maintenance training was given early this year to a group from Seattle and Everett, Wash., following a planners program attended by C. F. Willis Jr., Alaska Airlines president.

Richard Gilbert, executive vice president of the airline, was due at San Diego last week for a three-day 880-M familiarization session.

Mel Clause, assistant supervisor field service for transport service, was in Seattle a couple of weeks ago to lay the groundwork for support of the Alaska 880-M. Earlier in the month, J. D. Kennedy, field service rep, was there to assist in setting up the airline's own training program for ground crews.



ALASKAN BIRD — Alaska Airlines maintenance group admires Convair 880-M striped with airlines' colors outside Bldg. 3 at San Diego Plant 1. From left are John Huber, Rod Jacobson, Robert Hoffman, Walter Krotke, Boyd Blair, Marvin Van Buren, Sylvester Stadulis. Kneeling is Pascual de Paco, Viasa representative.

Delta 880 Will Fly On East-West Route Starting on Sunday

A Convair 880 jet transport will be flying new east-west routes when Delta Air Lines introduces coast-to-coast service this week end.

The Convair jetliner will be used on one of the three daily jet flights to start this Sunday (June 11) between Los Angeles and Atlanta, Ga. It is scheduled to depart Los Angeles at 4:30 p.m. (PDT), stopping at Dallas-Fort Worth, arriving in New Orleans at 8:35 p.m. (CST) and in Atlanta at 12:15 a.m. (EST).

Other Delta jet flights will leave Los Angeles at 2:30 a.m. (PDT), and a nonstop at 1:20 p.m. (PDT).

C. E. Woolman, president and general manager of Delta Air Lines, hosted one of three preinaugural transcontinental flights last week, flying nonstop from Atlanta to Los Angeles.

Dempsey on Panel For Space Future

Astronautics President James R. Dempsey and two Fort Worth men attended the first national conference on peaceful uses of space at Tulsa, Okla., May 26.

F. A. Curtis, FW chief of stability and flight controls, and H. T. Stocker, chief of information and technology, were present for the two-day conference, which was followed by a two-week space-for-peace show.

Dempsey participated in a May 27 panel discussion, "Present and Future of Manned Space Flight."

40,000 Welcome B-58 to Peru And See F-106s Fly 1,000 mph

An estimated 40,000 visitors were on hand when the B-58 Hustler made its Armed Forces Day debut at Bunker Hill AFB, Peru, Ind.

Indiana Governor Matthew E. Welsh christened the "Hoosier Hustler," first B-58 in the 305th bomb wing inventory.

Frank W. Davis, GD vice president and FW president, was made an honorary member of the 305th. Bestowing the honor was Col. Frank L. O'Brien, wing commander, who piloted the "Hoosier Hustler" from Fort Worth flight line to the Indiana base.

A faster-than-sound pass over the field by two F-106s, world's fastest fighter plane, was a highlight of the all-day event. The Convair-built fighters reportedly hit about 1,000 miles an hour in demonstrating the "sound of security."

On display, in addition to the B-58 and F-106s, were the B-52, B-47 and B-66 jet bombers; F-101 jet fighter; T-33 jet trainer; and C-47, C-123, C-124 and C-130 cargo aircraft.

ENGINEER'S PAPER WILL BE PUBLISHED

Glen W. Ashley, senior research engineer at Pomona, has written an article entitled "A Synchronous Band Pass Filter" which has been accepted for publication by Electrical Design News.

Wingless Flight

Water Ski Champion From SD Holds World Jumping Record

"It's like flying without wings." That's how Hal Roberts (Convair SD Dept. 160) describes the sensation when he hits the ramp on water skis, catapulting into the air at almost 50 miles an hour.

Roberts holds the world's championship (men's division) jump record of 93 feet set at a Harbor's Day meet in San Diego two years ago.

"That jump was the biggest thrill of my life," he says. But Roberts has made plenty of other jumps that have earned him title after title.

He has no less than four trophies on exhibition in the San Diego Hall of Champions in Balboa Park. He's won about every water ski meet worth winning, including the Southern California, California State, West Coast and U. S.-wide Masters. In addition, he's held the National Water Ski Jumping Championship for three years.

Roberts has been water skiing for about 20 years, entered his first competition 10 years ago.

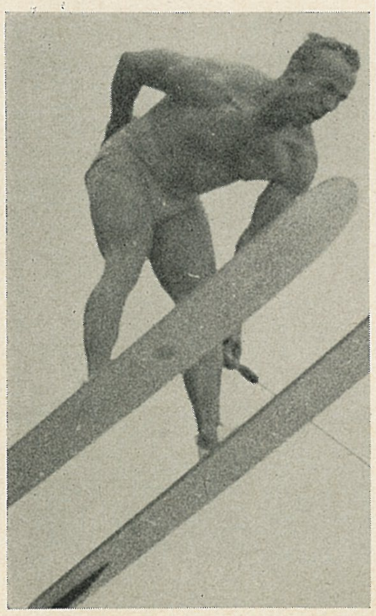
He will compete in the Master's in late June in Georgia and expects to follow the tourney trail to Austin, Texas, for the Nationals in August.

"When the boat passes the ramp and you're on the end of a 75-ft. rope the timing has to be perfect down to the fraction of a second. The jumper comes cutting in from the side and it only takes about 2½ seconds from the start of the cut before the jumper sweeps off the ramp."

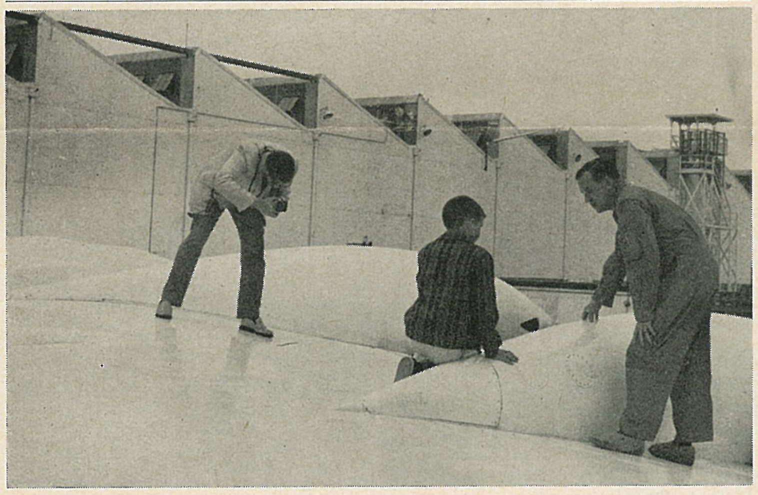
According to Roberts, the longer the cutting move is delayed the faster the jumper is going when he hits the ramp. This maneuvering is also more dangerous because the jumper risks a greater possibility of slapping into the side of the ramp instead of going off the top.

On official championship jumps the boat hits a clocked speed of 28 mph but in the cutting whiplash action (same principle as a rock being swung on the end of a string) Roberts' momentum has been timed at 46½-miles-an-hour.

Roberts not only flies on skis but he flies in the sky. He's logged 1,500 hours as a pilot and 1,700 as a flight engineer.



ON UP AND UP — SD's Hal Roberts, holder of world's ski jump record, shown in mid-air.



WING SHOOTING—Free-lancer Dick Snyder photographs Pilot J. M. Fitzpatrick and son on 990 wing.

Test Pilot's Son Wins Role in Photo-Story For Children About Birth of 990 Jetliner

"The Boy and the Giant" is the proposed title of a photo-story which a free-lance San Diego photographer and writer expects to publish this year.

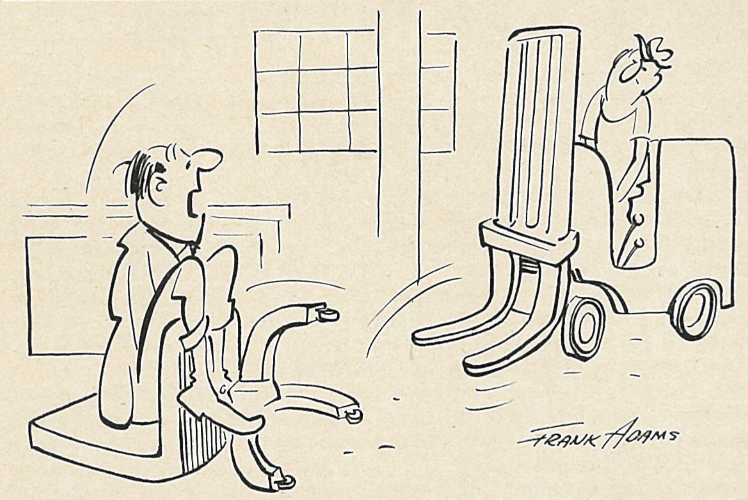
Convair enters the picture because the "boy" is a Convair SD pilot's son and the "giant" is a Convair 990 jetliner. The son is Michael Fitzpatrick, 11, whose father is J. M. Fitzpatrick.

To show the development of the world's fastest transport in terms that can be understood by 11-year-old boys and girls, author Dick Snyder is shooting some 500 photos at Convair SD and Lindbergh Field.

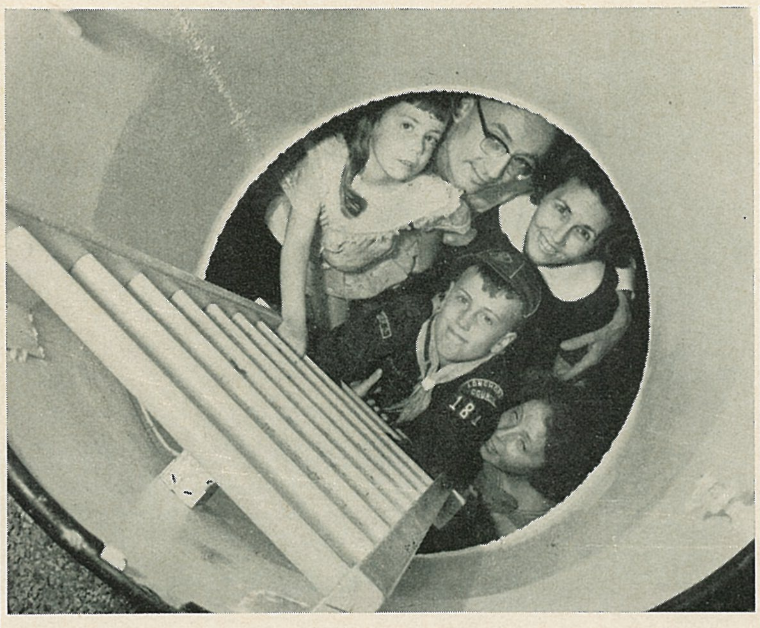
Of that number, Snyder says he will select about 50 for the story sequence which will trace the 990's progress from drafting board, down assembly line and into commercial use.

Snyder will write the story line around the photos, a method he used successfully in publishing "One Day at the Zoo," which is now enjoying a good sell in the children's market.

Pilot Fitzpatrick is in good position to furnish models for children's books directed at virtually all age groups. He has six children staggered between the ages of 2 and 15.



" . . . Suppose we give you a couple of more days to get the hang of it?"



UP THE HATCH—Boy Scout David Fouts, backed by mother and dad, leads way up ladder and out of shelter. That's Nancy at left, Kathleen at right.

'Do-it-Yourself' A-Bomb Shelter Serves as Study, Rumpus Room

Gene Fouts, Fort Worth design engineer, built a fallout shelter behind his home at 6415 Forest Hill Drive, Fort Worth, to protect against possible fallout from nuclear bombs.

But the do-it-yourself structure is proving even more popular as a family archive, tornado shelter, rumpus room, study, hobby shop, and darkroom—or simply a place to "get away from it all."

Fouts designed and built most of the shelter, which is buried under three feet (or 3,500 pounds) of earth. A steel company built the cylindrical 3/16-inch steel structure to Fout's design.

"Because it's underground, we enjoy 70-degree temperatures year-round," Fouts said.

Two regular-size bunks line either side of the shelter, while three smaller bunks for the Fouts children (Kathleen, 12; David, 9; and Nancy, 4) are located at the end.

"We keep about two weeks' supply of food in storage space under the two larger bunks," Fouts said, "and about a month's supply of water in the hot water heater.

"The shelter has all utilities, including a telephone."

An innovation by Fouts is the rear part of a regular bicycle, with seat, which serves a dual role: generating power for the electrical system, and serving as an "exerciser" should confinement be long.

"By cutting corners, I built my shelter for what a late-model used car or motorboat rig would cost," he said.

Braniff Executives View 'Supersonic Transport' Facility

A group of top Braniff International Airways executives took a close look at "supersonic transport" facilities during a May 25 tour of the Fort Worth plant.

They were: R. V. Carleton, senior vice president; Dan Hughes, vice president - operations; Bob Sawyer, manager of engineering; and George Cheetam, manager of flight.

Bob Patton, chief of FW aerodynamics, who hosted the visitors, gave an orientation on Model 62, proposed first step toward a supersonic transport.

The group also inspected Hustler manufacturing techniques and discussed characteristics of supersonic flight characteristics with Dick Johnson, manager of flight.

Carleton was chairman of a symposium on "supersonic transports" at the International Air Transport Association meeting in Montreal April 17-21.

Cy Greaves Named Firm's PR Director

Cy W. Greaves last week was appointed public relations director of Barnes Chase Co., San Diego advertising and public relations firm.

Until recently Greaves was manager of community and public relations for Convair at San Diego and had been with the company since 1943. During B. F. Coggan's regime as division manager, Greaves was his special assistant.

Astro Child's Painting Chosen From 11,000

A picture painted by Astro daughter Patricia Mordell, 7, is now on display at Galerie St. Etienne, New York City. Her father, Edward J. Mordell, works in Dept. 756-0.

Patricia's picture, "My Friends at a Birthday Party," was selected from more than 11,000 entries for the Biennial Exhibition of American Child Art. After the New York showing, the 100-picture collection will be exhibited through the country by the Smithsonian Institution.

Astro Payroll Reaches 26,368

While most think of the continued buildup of Astronautics employees in terms of off-site bases, the home plant has also seen some steady increases over the past months.

For instance, the Astro work force in the San Diego area alone on May 22 exceeded the total division population on Jan. 4, 1960.

Total Astro employment hit 26,368 on May 24. Of these, 8,220 were off-site, including Sycamore Canyon. Vandenberg AFB is the largest of the bases with 1,382 people.

Passing Scientific Information To Schools Speeded By GD Men

"Today's science today" is the goal of General Dynamics employees taking part in a new project to provide San Diego schools with the latest technical information as it emerges from the laboratory.

Heading the effort as chairman of the Advisory Committee on Community Educational Resources is C. F. McMenamy, Astro Dept. 522 and formerly of San Diego Dept. 6.

"This group is designed to provide liaison between authoritative information sources in the area and the school system," said McMenamy. "In some study areas we have cut up to 10 years from the time required to put new data in teachers' hands after its disclosure by industrial or other research agencies.

"The California Department of Education is enthusiastic about project results to date, and has been generous in its support of the program."

The committee was formed slightly more than a year ago. At San Diego, early participants included McMenamy, Keith Blair, Dr. D. W. Conover and Edward Philbin of SD Dept. 6, and H. W. Rubottom and L. J. Goldsmith of SD Dept. 3-7, all of whom remain active in the project.

Dramatic evidence of the project's worth appeared late last month when 1,000 copies of the first teaching aid—a collection of photographs with explanatory material—was formally presented to the schools by the committee's Elementary Space Task Group. These "study prints" entitled "Space Vehicles Today and Tomorrow" cover the Atlas ICBM in terms understandable by elementary school children.

The task group included Curtis L. Bates, Astro Dept. 510, a member of the advisory committee; James W. Crooks, Astro Dept. 551-1; and Clyde C. Helmer, Dept. 120-2.

In preparing the material, the Astro group compiled a set of 50 photographs with appropriate explanatory information. Educators among the group adapted the text to elementary reading levels, and 27 pictures were selected for reproduction through school facilities.

In addition to classroom aids, a seven-week space seminar was conducted by Crooks, Bates and Joan Facey, Dept. 322-1, for 42 teachers who also reviewed motion pictures, slides and publications prepared at Astronautics. These will be edited for fall classroom use as nine movies and 11 filmstrips.

Another space seminar is being scheduled.

Besides the space project the committee plans an inter-library loan service whereby materials from General Dynamics technical libraries and those of other area industries will be available to educators. A botany task group and a zoological unit are also in operation.

"Still another phase of the program is the periodic publication of 'Science Briefs,' which provide teachers direct communication with area scientists, engineers and mathematicians," McMenamy concluded.



PROJECT COMPLETED—Astro's C. F. McMenamy, chairman of Advisory Committee for Community Educational Resources, presents 1,000 copies of committee's first training package on Atlas missile to Ben Gumm and Dr. H. R. McCarty, audio-visual education officials from San Diego city and county school systems respectively.

GENERAL DYNAMICS CORPORATION NEWS

PARIS—Canadair has obtained orders worth about $3 million for airframe components and parts for F-104G aircraft for West Germany, Belgium and the Netherlands.

Production for West Germany comprises 40 sets of wings, rear fuselages and tail units which will be supplied to Lockheed for assembly into finished aircraft and ultimate delivery to the German Air Force. Added to earlier orders from Germany, Belgium and the Netherlands this brings the total production, by the Canadian subsidiary of General Dynamics, for Europe to 161 sets of these components.

In addition, Canadair has received orders worth nearly $1 million directly from the consortium of European countries which are producing the F-104G. These orders are for sub-assemblies which are highly machined to close tolerances and for flash-welded parts, all for the front fuselage section.

Canadair is also producing 40 sets of wings, rear fuselages and tail units for Japan.

★ ★ ★

GROTON—The U. S. Navy's top civilian officer will be the principal speaker at the launching of this country's newest Polaris-firing submarine here June 15.

Secretary of the Navy John B. Connally will deliver the main address when the Thomas A. Edison slides down the launching ways at Electric Boat Division.

★ ★ ★

ROCHESTER—Robert J. Gilson has been appointed general manager of the Military Products Division-Rochester of General Dynamics/Electronics.

Gilson was formerly director of systems management for the division. He succeeds Kenneth M. Lord, who has resigned.

Prior to joining General Dynamics/Electronics (then the Stromberg-Carlson Division of General Dynamics) 18 months ago, Gilson was with Hoffman Electronics Corporation, Los Angeles, as program director of a major electronic reconnaissance system, and before that with Litton Industries, Beverly Hills, Calif.

★ ★ ★

PARIS—An advanced systems trainer version of the Canadair CL-41 is being developed for radar training of F-104G pilots in NATO air forces. Known as the CL-41R, the new jet trainer has the same electronic equipment as the F-104G and uses the same characteristically long nose radome.

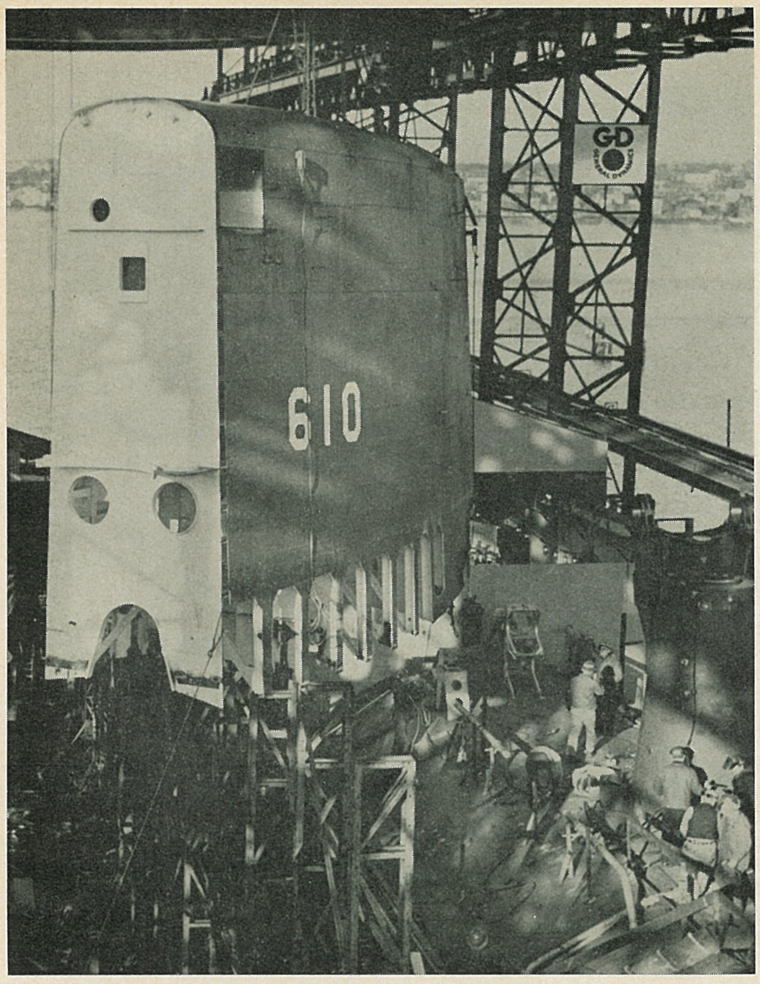
Use of complex electronic systems in advanced military aircraft has created the double requirement for training both pilots and systems operators. This can be accomplished by using a conventional pilot trainer followed by either an operational trainer like the F-104F or, much more cheaply, by the CL-41R for radar training.

By using a subsonic systems trainer, complementary to the F-104G, NATO air forces will save on training aircraft and support requirements without compromising efficiency.

★ ★ ★

MONTREAL — Slick Airways has expressed its intention to buy two more Canadair Forty Four swing-tail freighters, worth about $9 million with spare parts. Slick already has two turboprop Forty Fours on order, for delivery in September and October. The two additional aircraft are due for completion in March and May next year.

Canadair Forty Fours are scheduled to start service in July with The Flying Tiger Line and with Seaboard World Airlines. The military side-loading version is already in service with the Royal Canadian Air Force.



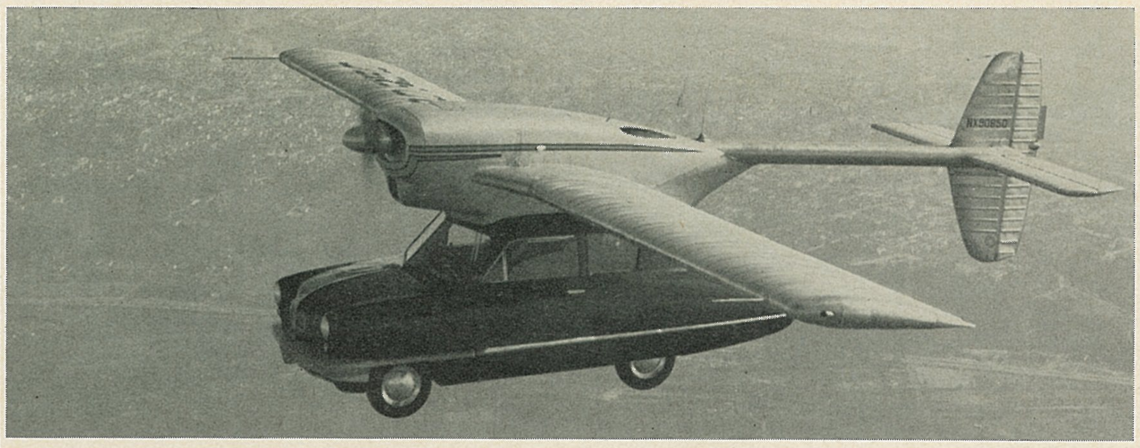
COMING ABOARD—Giant "sail" for Navy's newest Polaris-firing submarine, Thomas A. Edison, is swung aboard at Electric Boat. New 6,900-ton submarine will be launched this month.

USS Dewey Calls at North Europe Ports On Goodwill 'People to People' Tour

The advanced Terrier-armed USS Dewey (DLG-14) departed Norfolk May 20 for a goodwill tour of Northern European ports.

Parties for orphans, athletic events, "Open House" tours of the ship and souvenir gifts are only a small part of the extensive "people-to-people" program that has been initiated on board the Dewey. The first port of call was Portsmouth, England, May 29. There the Dewey received RAdm. W. R. Loud, Commander Mine Forces, Atlantic Fleet, and will carry his flag for the duration of the eight weeks cruise. Other ports to be visited include Rotterdam, Netherlands; Helsinki, Finland; Kiel, Germany, and other major ports.

Dewey will return to Portsmouth, England, July 16, and will then depart for deployment with the Sixth Fleet in the Mediterranean.



AIR DRIVING—"Flying Automobile" was among projects Consolidated considered while facing "reconversion" following wartime. Although it never went into production, it made some headlines at time. To operate car separately, simple release mechanism permitted jacking up wings and "fuselage" so car could be driven away under its own power.

Boom and Bust

Aircraft Industry 'Collapse' Followed World War II's End

(With this installment, No. 60, Convairiety's continuing history of Convair turns to "reconversion" years following great activity of World War II.)

As it had after World War I, the aviation industry shrank by a process resembling collapse starting in mid-1945. Convair quickly closed out its satellite divisions at Tucson, New Orleans, Allentown, Louisville and Elizabeth City, and San Diego Plant 2 was turned back to the government. By March, 1946, the corporation-wide payroll had dwindled to 12,822.

President Harry Woodhead noted in his annual report: "Until the nation's policy concerning airpower is firmly established, the aircraft industry will remain in a somewhat unsettled state."

The little Stinson Division converted quickly to production of four-place Voyager 105s for the civilian market and enjoyed apparent health. But the three main divisions were occupied largely with incubation of military and commercial products that were to bring Convair preeminence in selected fields later—the Convair-Liner at San Diego, the B-36 intercontinental bomber at Fort Worth, and at Vultee Field the forerunners of the delta wing F-102, the Terrier missile and the awesome Atlas ICBM.

Convair management was deeply involved in the problems of reconversion: to hold a trained technical force together and keep working capital profitably employed. One Vultee Field project was development of a prototype plastic-and-aluminum packaged home! And experimental flying autos were given a whirl at San Diego. In January, 1946, a controlling interest was purchased in ACF-Brill Motors Co. of Philadelphia (transit buses) and its wholly owned subsidiary, Hall-Scott Motor Car Co. of Berkeley (auto and marine engines). At an outlay of $2½ million the Nashville plant was equipped to manufacture kitchen ranges and freezer cabinets for Crosley Corp. (an AVCO affiliate) and buses for ACF-Brill.

Meantime, the late summer of 1946 saw the opening of quiet negotiations that would have ended Convair's existence by merging it into Lockheed Aircraft. The proposal was that Lockheed absorb the aviation divisions, and that AVCO withdraw, taking the Nashville property and ACF-Brill, and that Convair stockholders receive one share of Lockheed for each one and 1/16 shares of CVAC. These terms were agreed to by Victor Emanuel, AVCO chairman; Robert E. Gross, Lockheed president, and Irving Babcock, chairman of Consolidated since Girdler's resignation in April, 1945. But the merger movement lost momentum and plans to put it to a stockholder vote were dropped. A major factor was the setback suffered by Lockheed's principal commercial asset, the Constellation airliner, grounded by CAA in July.

Elmer Wohl Resigns As VP for Planning

Elmer P. Wohl, vice president-planning, last week announced his resignation effective June 15.

Wohl, who joined Consolidated Vultee in 1952 as executive assistant to the president, has been responsible for advanced planning throughout all elements of the Convair organization and evaluation of new business opportunities.

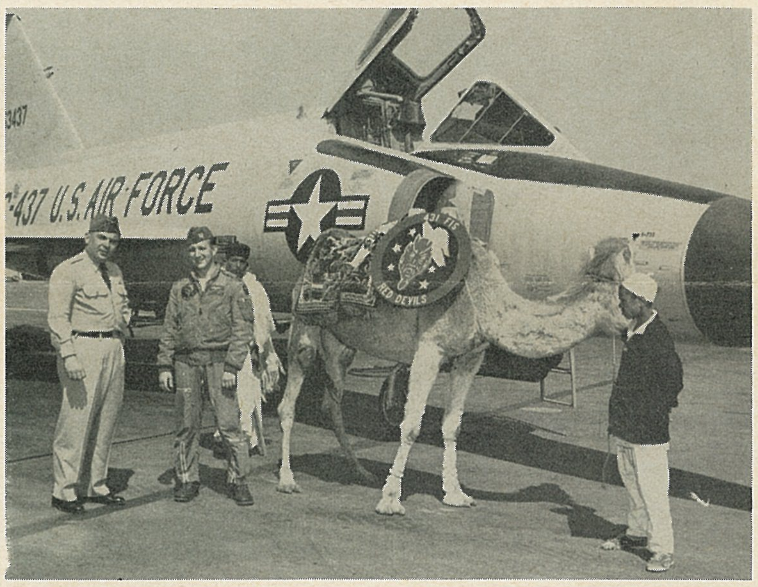
In accepting Wohl's resignation, Earl Dallam Johnson, General Dynamics Corporation president, expressed deep personal regret.

Electronics Adopts ES, CIP System at SD

General Dynamics/Electronics employees at San Diego will be able to utilize the same Employee Suggestion and Cost Improvement Proposal programs in effect at Convair San Diego.

SD systems and procedures will administer the program and upon their approval of ESs or CIPs, awards will be made by GD/E, Military Products Division, San Diego controller.

The ES program is for hourly people and awards are paid for ideas at 10 per cent of the estimated savings to the company for the first year. The CIP program is for flat-salaried persons and submitters receive recognition for their cost-cutting ideas.



DESERT "BEASTS"—A Convair F-102 and camel bearing emblem of 431st "Red Devil" Figher-Interceptor Squadron from Spain line up under African sun during recent weapon firing training in Libya. At left are Lt. Col. J. J. McCabe, 431st commander, and Capt. W. H. Stark, F-102 pilot.

Records Tumble During Drills For F-102s Competing in Africa

"Red Devil" pilots flying Convair F-102s of the 431st Fighter-Interceptor Squadron, Zaragoza Air Base, Spain, recently completed a record-smashing two months in African maneuvers.

During the annual weapon firing session at Wheelus Air Base, Libya, F-102s topped 17 out of 18 records, reported R. J. Helm and G. H. Perry, Convair field service reps based with the 431st.

Highest overall scores ever attained at Wheelus, set by the "Red Devils," included longest string of successful intercepts, highest success rate for any one day; highest success rate during weapons training phase; and highest individual pilot average; as well as lowest score for pilot errors.

Aircraft were deployed to Wheelus over the two months in flights of six aircraft and seven pilots every two weeks. Fifty-five maintenance men, two maintenance officers, and Helm went to the USAFE Weapons Center the first part of March to support the Convair jet interceptors of the 431st. Most of the maintenance people rotated after four weeks, although some were kept there throughout the full eight weeks of maneuvers.

According to Helm's report, it would be hard to say which flight was most outstanding. "If any one unit deserved special credit, it would be the maintenance detachment under command of Maj. Charles Nichols and Capt. Phillip Price. Never in the entire two months did the men relax until the last mission was completed."

Lt. Col. Joseph McCabe, 431st squadron commander, commended all F-102 flights and the entire maintenance detachment on their outstanding performance which "wrote a new book of records for rocketry training."

Texas Tech Cadet In AF Reserve Wins Award For Record

A GD/FW industrial engineer's son has been named the outstanding member of the Air Force Reserve Officers Corps at Texas Tech, and has received the annual Convair Cadet Award.

Receiving the honor was W. E. Mercer III, a sophomore. The award includes a certificate of merit, a model of the F-106, and a ribbon.

Young Mercer also recently received the Chicago Tribune Gold Medal Award as outstanding cadet in his corps.

Club Tourney Pairings Set

Pairings for the Convair Golf Club Championship opening June 11 at Flying Hills have been announced. Play continues June 18, 24 and 25.

In lieu of personal notification, pairings and starting times for first round matches on June 11 are as follows:

CHAMPIONSHIP FLIGHT. 8:34 a.m.—H. Napier vs. H. Richards; H. H. Moran vs. D. Cheek. 8:41 a.m.—P. Perretta vs. B. Vones; F. Viering vs. A. Bezverkov. 8:55 a.m.—M. McCord vs. J. Maughmer; W. Hines vs. B. Wray. 9:02 a.m.—J. Ross vs. D. Ramirez; A. Reiter vs. N. Tamm.

FIRST FLIGHT. 9:09 a.m.—D. Hart vs. J. Jackman; M. Ezell vs. L. De Belloy. 9:23 a.m.—J. Sentovic vs. E. McKenzie; R. B. Reid vs. B. Markey. 9:30 a.m.—J. Lowe vs. P. Hanna; J. Albright vs. S. Ciolak. 9:37 a.m.—J. Swartz vs. J. Thelen; J. Jones vs. J. Catalino.

SECOND FLIGHT. 9:51 a.m.—F. Wells vs. K. Stites; F. Gadient vs. J. Moore. 9:58 a.m.—C. Dunand vs. C. Pope; B. Kurch vs. O. Hasbrooke. 10:05 a.m.—J. Flitter vs. L. Richardson; P. Raney vs. B. Longino. 10:19 a.m.—M. Pruitt vs. B. Dastrup; J. Dix vs. E. Caldwell.

THIRD FLIGHT. 10:26 a.m.—G. Petzen vs. W. Everding; B. Selle vs. B. Ziegler. 10:33 a.m.—L. Hanning vs. G. Laudermilk; L. Therrien vs. B. Emerson. 10:47 a.m.—L. Goodman vs. H. Heist; H. Wilson vs. B. Vukotich. 10:54 a.m.—E. Moriel vs. B. Vargas; K. Eastin vs. R. O'Connor.

FOURTH FLIGHT. 11:01 a.m.—R. Gaughen vs. K. Arbo; P. Williams vs. F. Westfall. 11:15 a.m.—R. Reekers vs. E. Tuszynski; J. Friedman vs. C. Lepper. 11:22 a.m.—I. Raney vs. T. Mellen; J. Graves vs. J. O'Daffer. 11:29 a.m.—G. Scott vs. R. Esparza; B. Garrett vs. H. Gallant.

FIFTH FLIGHT. 7:17 a.m.—E. Peters vs. L. Canter; E. Lizarraras vs. G. Thiersch. 7:31 a.m.—J. Serafin vs. T. Mears; C. Durst vs. F. Burke. 7:38 a.m.—L. W. Williams vs. H. Russell; R. Sommers vs. H. Driscoll. 7:45 a.m.—C. Keys vs. T. Petitt; S. Olson vs. J. Conley.

SIXTH FLIGHT. 6:49 a.m.—J. Pehota vs. O. Barksdale; J. Duffy vs. K. Bradley. 6:56 a.m.—B. Hibbs vs. D. A. Scott; R. Cooley vs. V. Dimpel. 7:03 a.m.—J. Hammitt vs. C. Saunders; E. Balcewicz vs. C. Crocker. 7:10 a.m.—R. Crothers vs. F. Maus; C. Walton vs. E. Hunt.

SEVENTH FLIGHT. 7:59 a.m.—J. Terramagra vs. C. Shinkle; J. Peters vs. A. Kaufenberg. 8:06 a.m.—H. Araiza vs. P. Lewis; J. Rose vs. J. Zinn. 8:13 a.m.—L. Broussand vs. B. Buchholz; F. Rodgers vs. D. Spencer. 8:27 a.m.—F. Desrosiers vs. R. Blair; B. McColley vs. D. Crayton.

Halfacre Dominates Master Marksmen

Jim Halfacre (Dept. 180) swept the field with a double win at the May 28 bi-monthly match of Convair SD Pistol Club.

He topped the master class of the Police Course event with a score of 290 and won the center fire Short National with 263.

Dale Young (Dept. 31) stood second in master class with 281. Ralph Picard (GD/E Dept. 6) and Bill Dittmann (Dept. 6) were one-two in the expert with scores of 282 and 281. Bill Ginsky (Dept. 6) was top sharpshooter with 244; Bill Mentlick, whose father is in Dept. 401-2, was first in marksman with 249 and R. G. Lair (Dept. 401-2), second, 238.

Close behind Halfacre in the Short National was E. E. Bickar (Dept. 215) with a 262; Ash Bishop (Dept. 401-5), third, 253; Dittmann, fourth, 247.

Tom Hemphill Talks For Radio Club

Tom Hemphill, San Diego Division pre-design engineer and veteran satellite tracker, was a special guest at the May 25 meeting of the Astro CRA Radio Club.

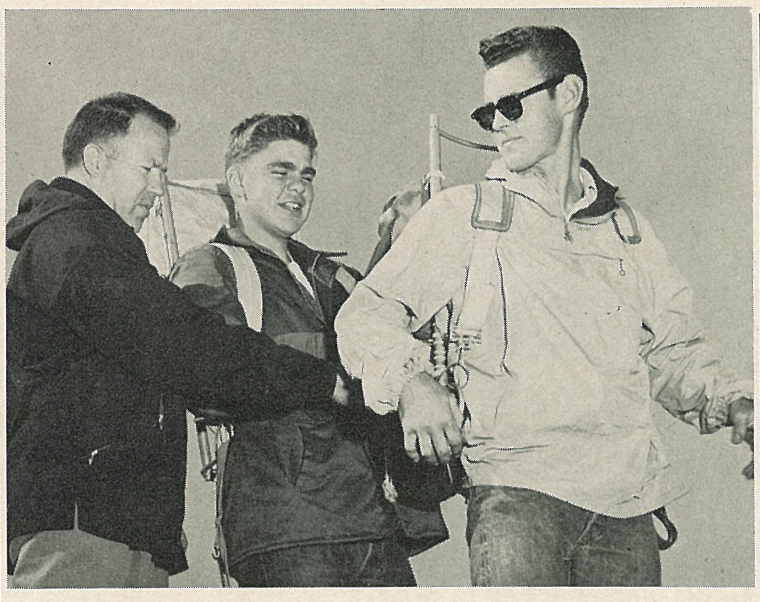
Hemphill brought along various items of equipment used in tracking and photographing satellites he has developed over an extended period of time. He told of his work and frequent requests from Smithsonian Institute for his photographs and tracking data.

Archers to Gather At Balboa Range

Archers will gather this Sunday (June 11) for their regular shoot at the Balboa Park field range.

Registration will be open from 8 until 9:30 a.m. with the shoot starting promptly at 9:45 a.m., Al Phipps, new CRA commissioner of the group, reminded.

An election will be held to name a new president to replace Phipps who resigned upon his appointment to commissioner.



PACK CHECK—Gene Boyd, adviser, checks packs of Explorer Scouts John Clemenshaw and Pete Sterbenz in preview of coming High Sierra hiking trip.

San Diego and Astro Sons Train For Rugged High Sierra Hike

Packs will replace paddles for intrepid young travelers as plans get under way for the annual summer outing, Aug. 4-20, of Explorer Squadron 340, Convair SD Management Club-sponsored troop.

Both San Diego and Astronautics sons, over 15, are eligible to sign for the first High Sierra trip in five years. In recent years the scouting group has been exploring California rivers by boat and raft. Present plans are to alternate the river and Sierra trips, said Andy Drollinger, squadron co-adviser.

Convair Recreation Associations at both SD and Astro are joining in support of this summer's two-week Sierra jaunt which will take qualified boys over 100 miles of the John Muir trail. They will be accompanied by three adults, including Drollinger (Astro Dept. 321-5) and Gene Boyd (SD-Dept. 197), squadron adviser.

Starting point will be on the east side of the range, near Bishop, Calif. From there the trail will wind through rugged Sierra country with side trips to search out good trout fishing streams and lakes off the main track. A climb up 14,000-ft. Mt. Whitney will climax the journey. Exit will be at Lone Pine. Boys will pack in enough food to last a week with a resupply midway.

All planning to make the trip must be at least 15 years old by Aug. 4 and pass a physical fitness exam, said Drollinger. A six-week briefing on mountaineering will start the middle of this month at the squadron's meeting place on Harbor Drive. Cost of the Sierra hike will be $25 per person, including $1 for insurance.

Any Convair son interested is asked to contact Drollinger at Plant 2, ext. 1264, or Boyd, also Plant 2, ext. 641, for more information or reservations.

Follies Star Skates Tonight

Janet Champion, an international skating star with the Ice Follies, will give a special exhibition for General Dynamics (both Convair and Astronautics) tomorrow (June 8) night.

She will skate at approximately 7:15 p.m. during a regular private skating session, displaying talent that has won her a starring role with the Ice Follies for the past five years.

Iceland, 6055 Lake Murray Blvd., is reserved for General Dynamics employees from 6:30 until 8 p.m. each Thursday. Skaters may continue at the regular public session (until 10 p.m.) at no extra cost. Free instruction is offered from 6:45 until 7:30 p.m. and group admission rates prevail until 7:30 p.m.

Skiers at San Diego Will Start Season

Water skiers at San Diego will be starting their summer season of skimming Mission Bay waters on week ends, said Gene Sevigny, CRA commissioner.

Regular water ski sessions will be held each week end at Tierra del Fuego from 9 a.m. to 1 p.m. on Saturdays and Sundays, he said. The club now has two inboard boats for use. Anyone interested in skiing or learning to ski is invited to attend the week end outings with skis, boats, and instruction furnished by the CRA group.

Next club business meeting will be June 22 with time and place to be announced later.

Club Discontinues Monthly Meetings

Last meeting of the Convair SD Stamp Club for the season was held June 1, announced Jack Benedict, CRA commissioner.

Meetings will be discontinued throughout the summer months. First fall session will be scheduled in September.

Salvage Schedule For June, July Set

Salvage yard schedule for Saturday sales to Convair and Astronautics people will be:
SD—June 10 and 24.
Astro—June 17, July 1.

KEG TEAM FALTERS IN CHAMPIONSHIP

A bowling team, sponsored by Astronautics CRA and composed of men from both Astro and Convair Divisions, recently staged an uphill battle that faltered one-half game from a league championship.

The league, the Lemon Grove 925 Classic, is one of San Diego's highest.

Astro won three games on the final night to take the second half title from Par Tee Golf, first half winner. The two teams met in an eight-game roll-off, four games per night. Astro won two the first night and one the second, only to drop the title by splitting a game that could have led to a tie.

Team members are Art King, Forest Erwin and Emanuel Di Giulio of Astro, Tony Zullo of Convair and Joe Nagy, an outsider.

Speakers to Engage In Grudge Match

Convair Toastmasters and Toastmistresses will match wits in a grudge duel next Tuesday night (June 13) in Convair executive dining room.

Hosted by Delta Toastmistresses, the dinner speaking bout will give Toastmasters a chance to avenge their defeat at the hands of the ladies a couple of months ago.

At the May 29 joint meeting with the Gavaliers, composed of SD airline personnel, best speaker's award went to Hershell Hornsby of Astro.

Box Seats, Two For Price of One, On Sale For June 21 Padre Game

Convair Recreation Associations at San Diego and Astronautics are joining forces June 21 to provide employees with a "bargain rate" night of baseball entertainment.

Box seats, 4,000 of them, normally selling for $2 each will be offered to employees for only $1. They will entitle holders to a full evening of sports fun at Westgate Park.

Highlight will be a Pacific Coast game pitting San Diego's Padres against Portland. Game time is 8 p.m. At 7:30 p.m. Jackie Price, baseball clown, will present a special show. For Convair fans there will be special door prizes provided by CRA.

Tickets go on sale tomorrow (June 8) on a first-come, first-served basis. They will be offered at employee services outlets at both divisions. Astro sales will be conducted during normal employee sales hours from 11 a.m. until 1 p.m., Monday through Friday, as long as tickets last.

Tick Canyon Jaunt Last For Rockhounds

Rockhounds at Convair SD will hold their last club meeting until fall tomorrow night (June 8) at 7:30 p.m., in the Gillespie Field Clubhouse.

Final field trip of the season May 28 saw 39 members trekking to Tick Canyon for a one-day rock hunt. A fine deposit of howlite was uncovered to supply everyone with large chunks of cutting material, reported B. R. Swarts, club spokesman.

Plans are going ahead for participation of CRA Rockhound Club in the San Diego County Gemboree Conference in early September. Jim Sugg will be the SD group's representative on the planning committee. Fourteen rockhound societies in San Diego County will contribute to the gem and mineral display in Balboa Park Electric Bldg. The conference is under sponsorship of San Diego Gem and Mineral Society.

FENCERS CAPTURE LOS ANGELES MEET

Astronautics fencing enthusiasts assigned in the Los Angeles area participated in a competition at Garden Grove—Bolsa High School last month.

Fencers from five clubs were involved in the matches, and the Astro team coached by L. E. "Jeep" LaMont, Dept. 280-5, won five of six medals awarded.

Firsts went to Mrs. Helen Harris and Roy Burns; seconds to LaMont and Fran Ivey, Dept. 197-9, and a third place to Mrs. Delca Burns, Dept. 825-0.

Armed with these laurels, the Los Angeles group plans a match with their San Diego counterparts later this summer. Mike Hurley, Astro CRA commissioner, coaches the San Diego fencers.

Lensmen Arrange Photogenic Models

Camera fans at Convair SD will be shooting photogenic models at their June 12 meeting in Photo Arts Bldg., Balboa Park, 7:30 p.m.

Delmary Pack (Dept. 6) and Bob Reuther (Dept. 31) will pose for the shutter bugs. Guests are invited to bring their own cameras and take part in the shooting, said Ron Ainsworth, club spokesman.

Another treat is coming for CRA Camera Club and guests at the June 26 meeting when color slides of Flemish paintings will be shown. Art students from Spanish Village will be invited to join in discussion.

Delta Divers Slate Saturday Session

Former, new, and potential members of Delta Divers are urged to get together for the regular skin diving meet Saturday morning.

Meeting place is Diving Locker at Pacific Beach; time, 9 a.m.; purpose, to go diving.

Monthly meeting will be fourth Tuesday evening of the month, June 27. Anyone interested is asked to call Harry Ruscigno, ext. 2348, Plant 1.

Tie Tack and Photo Sales Hours Set

Employee services at the Astro plant has set up new hours in which such items as tie tacks, pictures, badge holders, etc. will be sold.

The office, located in the cafeteria, will handle sales from 11 a.m. until 1 p.m. through the week for first shift and from 4 until 5 p.m. for second shift.

Road Runners Hit New High On May Trip

Nearing the end of their first full year as a CRA-sponsored activity, Convair SD Road Runners turned out in record numbers for the May outing at Live Oak County Park.

No less than 107 parents and children pulled up at the park in 23 trailers and two campsters to start the week end off.

Nearly all those present Saturday night filled up with Mulligan stew, prepared in a giant 15-gallon pot by chefs Lowell Ward and Pete Peterson. It took from 10:30 a.m. to 6 p.m. to complete cooking the tasty dish.

Two tables of gem exhibits were shown during the week end by Mr. and Mrs. Ed Wawrzynski, who are members of the CRA Rockhound Club as well as Road Runners enthusiasts. Additional diversion was provided by Mr. and Mrs. John Simas who showed slides of past trailer outings.

Latest club trip was a beach outing at Costa Downs over the past week end. Ballots have been mailed for election of new officers and results will be announced at the June 15 meeting at 7:30 p.m. in the CRA Clubhouse, Gillespie Field.

Ted Anderson's Son To Attend Academy

A Convair SD son, who won a $100 U. S. Savings Bond as runner-up in the 1961 Management Club scholarship competition, has been accepted for admission to the U. S. Naval Academy at Annapolis.

He is David W. Anderson, 18, son of Ted A. Anderson (Dept. 192). The appointment was announced by Congressman James B. Utt. The Convair son will report to the Academy July 5.

As a student at Helix High School, David was president of the student body, captain and all-league guard on the football team, and ranked fourth scholastically in a class of 337.

Hoedowners Select New Officer Slate

Lou and Connie Charity are new presidents of the Hoedowners square dancing club, following recent elections. Wes and Muriel Oswald were elected vice presidents of the Convair SD group.

Ellen Enlund was elected secretary. Stan and Louise Fandel, retiring presidents, and Roy and Corky Cowley are Hoedowner representatives to the local dancing association. Installation was held June 4 at a board meeting at Gillespie Field.

880 Flies Nonstop NY to LA And Return

A Convair 880, operated by Trans World Airlines, made a nonstop transcontinental commercial flight for the first time May 18.

The 880, designed as a medium-range jetliner, flew nonstop from New York to Los Angeles and returned nonstop the next day.



KINGPINS—More than 100 SD league and championship tourney bowling winners attended awards banquet May 20 sponsored by CRA. They collected total of 75 trophies. In top row photo at left is winning Mixmaster's League team: Lee and Cathy Wall, A. "Frenchy" Desrosiers, Joanne and Frank Zito. Around microphone in next photo are CRA Commissioners Mike Brooks, Jim Hayman. Next is top Clairemont Jet League team: Jean Gilfillan, R. Gilfillan, Lou Draper, T. Draper, J. Wilson. Last is R. R. Koser who rolled high scratch game of 277 in championship. In first bottom shot are "all events" winners Jim Rodgers (scratch) and Sam Leverett (handicap). Next is Mixed Scratch League Timberjet team: Jim and Catherine Hayman, Bob Harvey, Shirlee Zumwalt, Omer Engels. In third photo is winning mixed doubles tourney team: Vi Boleheimer, Forest Erwin. Top Whirlaway League team in last photo includes Bob and Jean Saunders, Lloyd Sires, Irene and Walt Duzyk.

COIN COLLECTORS TO ENTER DISPLAY IN DEL MAR FAIR

An exhibit of the Convair SD Coin Club is being prepared for entry at the Southern California Exposition and San Diego County Fair at Del Mar, June 30-July 9.

Bob McCracken, past president of the CRA group, is in charge of arranging the display which will be included in the classification for numismatic club entries.

Any individual interested in entering displays may get rules and entry forms from Al Baber, Coin Club president, at ext. 456, Plant 1. Baber's location is Bldg. 1 mezz., Col. G-3.

Awards at the second quarterly exhibit held at the group's May meeting went to Scott Clem, best of show for his display of souvenir coins, including German railroad tokens. Vince Bacon (Dept. 6) won first place with his exhibit of Canadian mint sets. Tom Huber copped the junior plaque with his Canadian coins.

Paul Hamm gave an illustrated lecture on "so-called half dollars," souvenir coins.

Theme of the third quarterly exhibit of the club year in August will be U. S. coins of the 18th century, said Baber. Also announced at the May meeting was the appointment of I. W. Belenzon (Dept. 400) as bourse chairman for the San Diego Coinerama to be held in October. Belenzon is one of the Convair group's delegates to the San Diego Inter-Club Numismatic Council.

Convair-Astros Play At New Astro Park

Convair-Astro's, joint SD and Astro softball team, will dedicate Astronautics lighted softball diamond at their June 17 tilt.

They will meet Huntington Park in a regular league game at the Kearny Mesa ball park at 8 p.m.

Ceremonies to launch the newly-lighted diamond begin at 7:30 p.m. with all Convair people invited, free of charge.

The ball field was built east of the Astro main plant, in the CRA recreation area, by Sycamore Canyon employees. Lighting was put in by Astro Dept. 250.

FREE ROLLER SKATE TICKETS OFFERED

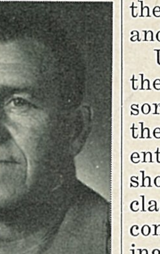
Free tickets are on hand at Convair SD employee services for the next Convair roller skate night Monday (June 19). Skaters can whirl for free at Skateland, Front and G Sts., by presenting cards.

CRA Sports & Recreation Convairiety

Al Phipps, State Bow Authority, Appointed Archery Commissioner

A Convair SD veteran of 20 years, who is a leader of archery activities throughout the state, has been appointed by Convair Recreation Association as commissioner of the Archery Club.

He is Al Phipps of Dept. 401. He will resign from his present position as club president, an office he has held for no less than five terms. An election will be held to name a new president.



Al Phipps

Since 1952 Phipps has been the man behind the scenes in organization of CRA archery activities. He has played no small part in building up the group's membership which now numbers some 50 active participants.

In addition to his CRA work, Phipps is well known throughout the state as president of the Southern Border Archery Association, chairman of the Balboa Park Field Range, and board member and sectional director of the California Bowmen Hunters and Field Archers Association.

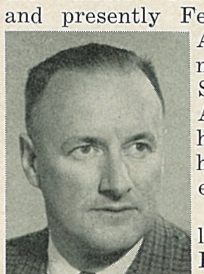
Under Commissioner Phipps, the CRA Archery Club will sponsor shoots for Convair bowmen on the second Sunday of each month, enter teams in state and sectional shoots, offer archery instruction classes at periodic intervals, and conduct business and social meetings on the third Thursday of each month.

Phipps will have considerable help in his new role as commissioner. His wife Pauline, and two sons are avid archers.

Ted Sanford New Head Of Three CRA Groups

Appointment of Ted W. Sanford of Dept. 6 as commissioner of three CRA groups—Aeromodelers, Solo Flyers and Glider Club—was announced last week.

Sanford, an active member of the Glider Club since 1952 and presently Federal Aviation Agency coordinator at Convair SD, succeeds V. A. Korski who has resigned his commissionership.



Ted Sanford

Korski is leaving for the Far East as a Convair field service representative in support of jet transports going to Japan Air Lines and Civil Air Transport of Formosa.

For the past 10 years Sanford has helped administer and direct all top glider meets at Torrey Pines. Though he owns a glider, Sanford has served as operations manager for so many sailplane meets that he rarely has had an opportunity to compete.

A former naval aviator and veteran of 10 years of active duty in the Marine Corps, Sanford is presently a colonel in the Marine Corps Reserve. His high-school-age daughter and a son who is in college have both been active participants in the CRA Water Ski Club.

Largest of the CRA groups under Commissioner Sanford is the Glider Club which includes some 38 active Convair members, many of whom own their own planes. The SD group is affiliated with the Associated Glider Clubs of Southern California which meets the second Saturday of the month at Golden Hills Recreation Center.

Main activity of the Solo Flyers is a series of ground school classes conducted for Convair student pilots at Jim's Air Service at Lindbergh Field. Classes have been temporarily interrupted during the summer months.

CRA Calendar

(In view of the fact that Convairiety now carries the complete CRA calendar only at intervals, it is suggested that readers clip this activity list for future reference.)

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AEROMODELERS—Ted Sanford, commissioner, exts. 1627 or 1748, Plant 1.

ARCHERY—Al Phipps, commissioner. Home phone CY-5-8194. Club meets third Thursday, 7:30 p.m., CRA Clubhouse, Pacific Hwy. Workshop in clubhouse open each Thursday, 7-9 p.m. Monthly shoots second Sunday of each month, Balboa Park range. CRA office, ext. 1245, Plant 1, for information.

ASTRONOMY—Keith Sears, commissioner, ext. 1705, Plant 1. Club meets first and third Fridays, 8 p.m., at CRA Recreation Area, Gillespie Field, El Cajon.

BADMINTON—Call CRA office, ext. 1245, Plant 1, for information. Organized play and instruction Tuesdays, 7:30 p.m., Federal Bldg., Balboa Park. Open play for Convair employees and families each day.

BASEBALL — Pete Beyrer, commissioner, ext. 1245, Plant 1.

BASKETBALL—Gil Crosthwaite, commissioner, ext. 426, Plant 1.

BOWLING—Jim Hayman, ext. 1155, Plant 1; Mike Brooks, HO-9-8793, commissioners.

BRIDGE CLUB—Pete Beyrer, commissioner, ext. 1245, Plant 1. For information call Frank Westphal, ext. 2225, Plant 1. Meetings every Tuesday, 7:30 p.m., at Hotel Barcelona, 326 Juniper St.

CAMERA CLUB—C. E. Schultz, commissioner, exts. 692 or 454, Plant 2 (second shift). Regular meetings second and fourth Mondays, 7:30 p.m., Photo Arts Bldg., Spanish Village, Balboa Park. Darkroom in CRA Clubhouse available to club members.

CHESS CLUB—Gil Crosthwaite, commissioner, ext. 426, Plant 1. Club meets each Wednesday, 7:30 p.m., CRA Clubhouse. Sets available for lunch period games.

COIN CLUB—Gil Crosthwaite, commissioner, ext. 426, Plant 1.

DELTA DIVERS — Gil Crosthwaite, commissioner, ext. 426, Plant 1. Meetings fourth Tuesday of each month, 7:30 p.m., Conference Bldg., Balboa Park.

FENCING CLUB—Workouts and instruction each Friday night, 7-10 p.m., YWCA, 10th and C Sts. For information call Pete Beyrer, ext. 1245, Plant 1.

FISHING—R. W. Menzie, commissioner, ext. 1181, Plant 1. Club meets third Tuesday of each month, 7:30 p.m., Gillespie Field Clubhouse.

GARDEN CLUB—E. L. Zimmerman, commissioner, ext. 2380, Plant 1. Club meets second Wednesday of each month, 7:30 p.m., Floral Association Bldg., Balboa Park.

GLIDER CLUB—Ted Sanford, commissioner, exts. 1627 or 1748, Plant 1.

GOLF—Ken Wulfemeyer, commissioner, ext. 1705, Plant 1.

GUN CLUB—Jack Swank, ext. 1161, Plant 1; Gene Horstman, ext. 405, Plant 1, second shift, commissioners. Club meets second Tuesday of each month, 7 p.m., Gillespie Field Clubhouse. Club shoot, rifle, trap and skeet, first Sunday of each month at CRA range, Gillespie Field, El Cajon. Open shooting each Sunday and Wednesday evening during summer months.

ICE SKATING — Martha Woodberry, commissioner, ext. 1245, Plant 1. Skating sessions for Convair employees and their families each Thursday at Iceland, 6055 Lake Murray Blvd. Special Convair rates between 6:30 and 8 p.m.

IN-PLANT ACTIVITIES—Equipment available for horseshoes, washer pitching, shuffleboard, chess, checkers, also cards for bridge, pinochle, etc. Contact CRA headquarters, ext. 1245, Plant 1, or department CRA representatives.

JUDO — Pete Beyrer, commissioner, ext. 1245, Plant 1. Instruction each Thursday, 7 p.m., CRA Clubhouse on Pacific Hwy.

MODEL RAILROAD — Pete Beyrer, commissioner, ext. 1245, Plant 1. Meetings each Friday at 7:30 p.m., House of Charm, Balboa Park.

MOVIES—Reduced-price movies each Friday, Saturday, and Sunday nights at Adams Theater, 3325 Adams Ave. Adults, 50c; children under 12 free if accompanied by adult.

PISTOL CLUB—Ash Bishop, commissioner. Home phone, BR-4-1549. Club shoots second and fourth Sundays of each month at 9 a.m., San Diego Police Pistol Range, Federal Blvd. and Home Ave.

RADIO CLUB—James Lack, commissioner, exts. 1845 or 2958, Plant 1. Club meets Thursday after issue of **Convairiety**, 7 p.m., at Radio Club Headquarters, Harbor Drive.

RIDING CLUB—Marc Beresford, commissioner, ext. 2483, Plant 1. C. L. Pogorel, co-commissioner, ext. 1740, Plant 1.

ROAD RUNNERS—Trailer club meets third Thursday of month, 7:30 p.m., CRA Clubhouse, Gillespie Field. Call Pete Beyrer, ext. 1245, Plant 1.

ROCKHOUNDS—Dan Whorton, commissioner, ext. 426, Plant 1. Lapidary classes Tuesday and Wednesday, 7-9 p.m., Rockhound Shanty, Pacific Hwy. Classes for second shift, Tuesdays, 12:30-2:30 p.m. Shanty will be closed from June 20 to Sept. 12. Regular meetings second Thursday of each month, 7:30 p.m., Gillespie Field CRA Clubhouse.

ROLLER SKATING — Convair skate night third Monday each month. Free tickets at employee services office, Plant 1. Saturday matinees each week, 2-4:30 p.m., Skateland, Front and G Sts. Admission 25c per person for Convair employees and their families. Admittance by club membership card. Cards available at employee services.

SKI CLUB—Joe Harris, commissioner, ext. 1845 or 2958, Plant 1.

SOFTBALL — Tony Berardini, ext. 2910, Plant 1; Gil Crosthwaite, ext. 426, Plant 1, commissioners.

SOLO FLYERS—Ted Sanford, commissioner, exts. 1627 or 1748. For ground school information contact Rex Robinson, ext. 2265, Plant 1.

SPECIAL EVENTS and COMMISSIONERS-AT-LARGE—Eddie Robinson, Paul Pearson.

SPORTS CAR CLUB—Gerry Wright, commissioner, ext. 2074, Plant 1. Club meets first Wednesday of month, 7:30 p.m., Natural History Museum, Balboa Park.

SQUARE DANCING — Maury Scholz, commissioner, CY-5-3806. Call CRA office, ext. 1245, Plant 1, for information. Beginners classes Thursdays, 8 p.m., American Legion Hall, 4061 Fairmount Ave. Party night, fourth Saturday of month, 8 p.m., American Legion Hall, 4061 Fairmount Ave.

STAMP CLUB—Jack Benedict, commissioner, ext. 1650, Plant 1. No meetings until September.

SWIMMING — Pete Beyrer, commissioner, ext. 1245, Plant 1. Family swim night first Saturday of each month, 7-9 p.m., Mission Beach Plunge. Free tickets at employee services.

TABLE TENNIS—Pete Beyrer, commissioner, ext. 1245, Plant 1.

TROPICAL FISH—Pete Beyrer, commissioner, ext. 1245, Plant 1. Club meets second Tuesday, 7:30 p.m., CRA Clubhouse, Pacific Hwy. Workshop every Tuesday and Thursday, 7 p.m.

WATER SKI CLUB—Gene Sevigny, commissioner, ext. 1032, Plant 1. Regular meetings fourth Thursday of each month. Weekend skiing during summer months off Tierra del Fuego, Mission Bay. For information call Herb Wexler, ext. 2366, Plant 1.

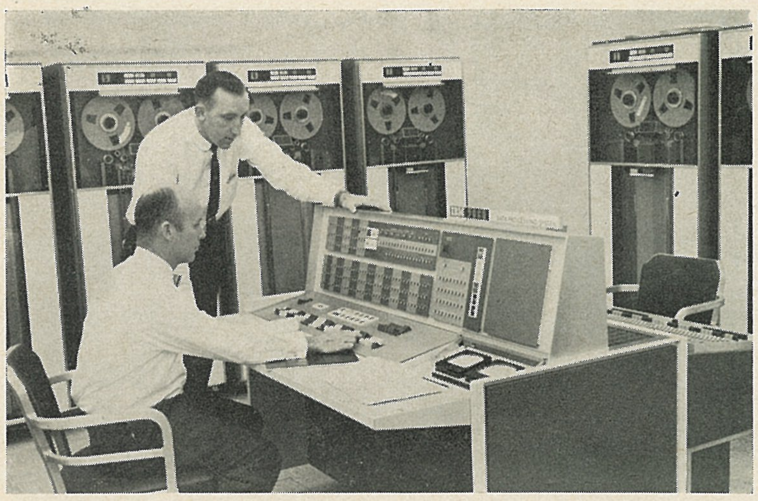
WOMEN'S ACTIVITIES — Martha Woodberry, commissioner, ext. 1245, Plant 1. Grayce Fath, co-commissioner, ext. 1071, Plant 1.

Group Golf Lessons Will Close Friday

This Friday (June 9) is last day to sign for CRA-sponsored golf lessons.

Group lessons for $10 a person will start next week (June 13 and 15) at Mission Valley Country Club. Classes, limited to 10, will be held Tuesdays and Thursdays at 5 and 6 p.m. for six weeks.

Registration is taken at ext. 1705, Plant 1.



TRIAL RUN—A. E. McQuoid sits at master console of new IBM 7090 data processing system at San Diego, magnetic tape units in background. Checking him out is L. J. Cagle, IBM customer engineer.

New Lightning-Fast Computer Will Speed Up SD Calculations

One of the most powerful data processing systems in existence is going into operation at Convair Division for joint use with General Atomic Division of General Dynamics.

The lightning-fast IBM 7090 engineering computer replaces the IBM 704 which has been in use at San Diego the last four years. The 704 will be retained during a transition period, probably a month, while programing is switched to the new system, said A. E. McQuoid, in charge of SD digital lab operations and systems.

Astronautics Division also has a 7090 data processing system in operation at the Kearny Mesa site. It replaced Astro's former 704 system last fall.

"The new data processing system will speed up our operations and capabilities unbelievably," said McQuoid. "We now can get solutions to problems in at least a third the time needed with the 704, and relieve the work overload that has been keeping three shifts busy on the smaller system."

Overall speed of the 7090 is from three to five times as fast as the 704. And its internal operating speed is about six times as fast—it can make 230,000 additions a second compared to 40,000 on the 704. (A man can do only one addition a second on a standard office calculator!)

The heart of the system, the magnetic core memory, can contain 32,000 words of information at a time, each word the equivalent of 10 decimal digits. The core must be constantly bathed in oil to reduce the extreme heat generated by the electric circuits. (It takes just 2.18-millionths of a second for a number to come out of the core into the central processor.)

Besides its tremendously increased speed, the new system can do three operations simultaneously. New information can be fed in as it is computing problems, and, at the same time, writing out information already calculated. Fourteen magnetic tape units record solutions.

Tapes then are run through a new Stromberg-Carlson high speed printer, the S-C 5230, which prints at a top speed of 3,800 lines, 120 characters to a line, in one minute. Information comes out of the printer on 11x11-inch sheets of paper going through the machine at 51 feet per minute.

The 7090 system, S-C printer, and all supplementary equipment are installed in a 40x80 air-conditioned room in Bldg. 54A at Plant 1. Both San Diego and General Atomic each will have 35 programers preparing information for the new computer.

A complete flight of a proposed aircraft or missile can be simulated on the system by mathematical equations before the craft is any more than designs on engineering drafting boards, said L. Lapidus, in charge of digital computing programing.

The 7090 will be used extensively in reliability studies to determine long-range tendencies in product performance, he continued.

One of the new uses of the engineering computing system will be generation of tapes from engineering calculations to be converted into graphs by means of a Stromberg-Carlson plotter, located at Astronautics.

In charge of SD digital computing department is W. J. Schart, chief, with H. W. Buckner, supervisor of digital computing lab.

Comic Strip Features CAT 'Mandarin' Jet

Followers of the Buzz Sawyer comic strip had no trouble recognizing the CAT "Mandarin Jet" in a recent episode as the Convair 880-M.

Of course, the Sawyer inclusion of the Chinese airline jet was slightly in advance of delivery date—slated for early this month. The exotic CAT 880-M will be going into use soon over the line's Far East network.

New York to Paris Flight Gives B-58 Another Record

A B-58 Hustler from SAC's 43rd Bomb Wing streaked across the Atlantic from New York to Paris in 3 hours, 19 minutes, 18 seconds May 26 to halve the existing world's record for the over 3,600-mile span.

Commemorating the 34th anniversary of Charles Lindbergh's 33-hour, 32-minute solo flight over the same route in 1927, the crack Carswell AFB crew averaged nearly 1,100 mph during the longest "sustained" Mach 2 run in aviation history.

A crew of Maj. W. R. Payne, pilot; Capt. W. L. Polhemus, navigator; and Capt. R. R. Wagener, DSO, started their trans-Atlantic dash from New York at 5:46 a.m. and flashed by Le Bourget Airport, Paris at 9:05 a.m. (Fort Worth time).

(Actually, the crew finished the run at a point south of, but on the same parallel as Paris, then cruised northward for a 9:25 a.m. landing at Le Bourget.)

Best time for the New York-to-Paris run previously recorded was a 5-hour, 45-minute flight by a commercial jet airliner, reportedly made with the aid of strong tail winds. However, this route routinely requires well over six hours on most commercial jet trips.

Hustler No. 54, which only a few weeks before had shown its mettle in a record-breaking run for the Bleriot Trophy, was used in the flight to France—and fame. The ship was appropriately renamed "Spirit of St. Louis III" for the event.

Maj. Payne lifted the delta-wing Hustler off the Carswell runway at about 3:10 a.m., and appeared over Washington, D. C., at about 5:26 a.m.

Twenty minutes later, the Hustler started its Mach 2 dash off the lower tip of Manhattan Island.

Rendezvousing on schedule with KC-135 tankers over the Atlantic, the Hustler set down at Le Bourget Airport—the same landing strip used by Lindbergh nearly 34 years ago—with ample reserve fuel.

Men of many nations, attending the International Air Show in Paris, were on hand to greet the high-flying Hustler following its dramatic debut in a first flight outside the North American continent.

When the B-58 set down following its supersonic sprint, it had actually covered over 5,400 miles from Carswell AFB to Paris.

The Hustler was to remain on static display at the air show, with flight demonstrations slated June 3 and 4, before returning home.

Also at the Air Show to receive the Bleriot Trophy was the record-breaking crew which averaged 1,302 mph for over 30 minutes: Maj. Elmer E. Murphy, pilot; Maj. Eugene S. Moses, navigator-bombardier; and Lt. David S. Dickerson, DSO.



FLIGHT TALK—Navigator W. L. Polhemus, left, makes last-minute calculation before New York-to-Paris flight. Capt. R. R. Wagener, DSO center, and Maj. W. R. Payne are ready to roll.

Improved Heart Pump Version Undergoes Check at Hospital

Improved version of the mechanical heart pump, developed by Convair engineers, is now in final checkout stages.

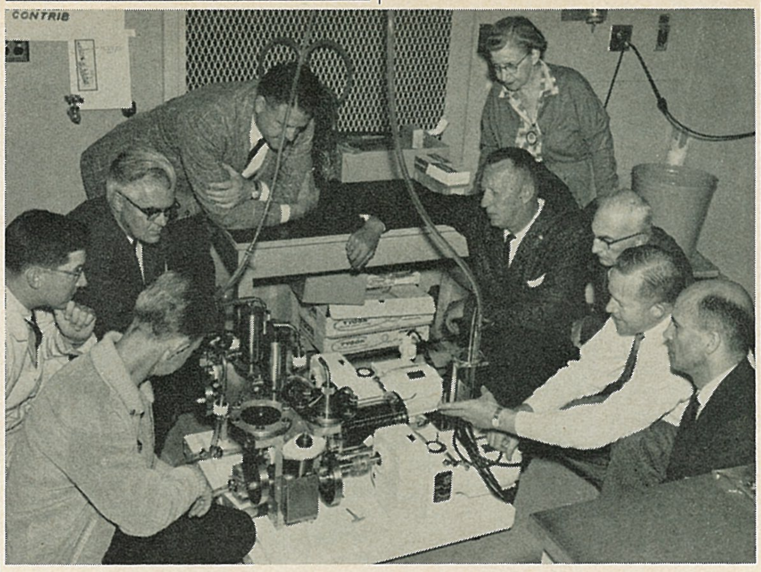
Recently assembled, the new-type "heart-lung" machine is at Sharp Hospital for full clinical testing and certification for use in open-heart surgery.

So far, Con-Trib-Club at SD has contributed $7,000 for development of the refined version, a follow-on to the prototype which has been used in 75 heart operations during the last year-and-a-half.

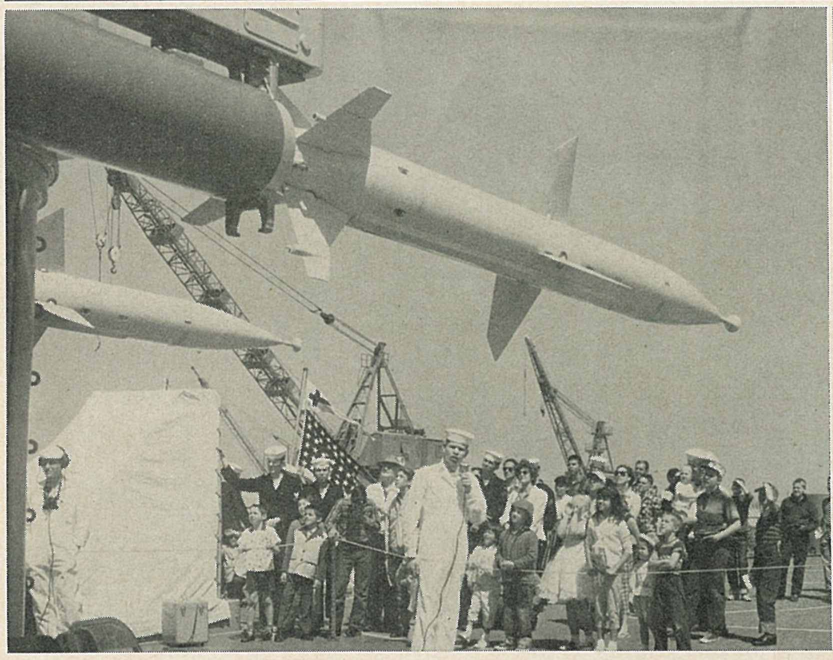
The new machine is smaller, more compact; has a speed control for pumping blood at different rates for patients of various ages, sizes; has a stand-by unit for emergencies; can be hooked to hand-crank apparatus in case of power failure.

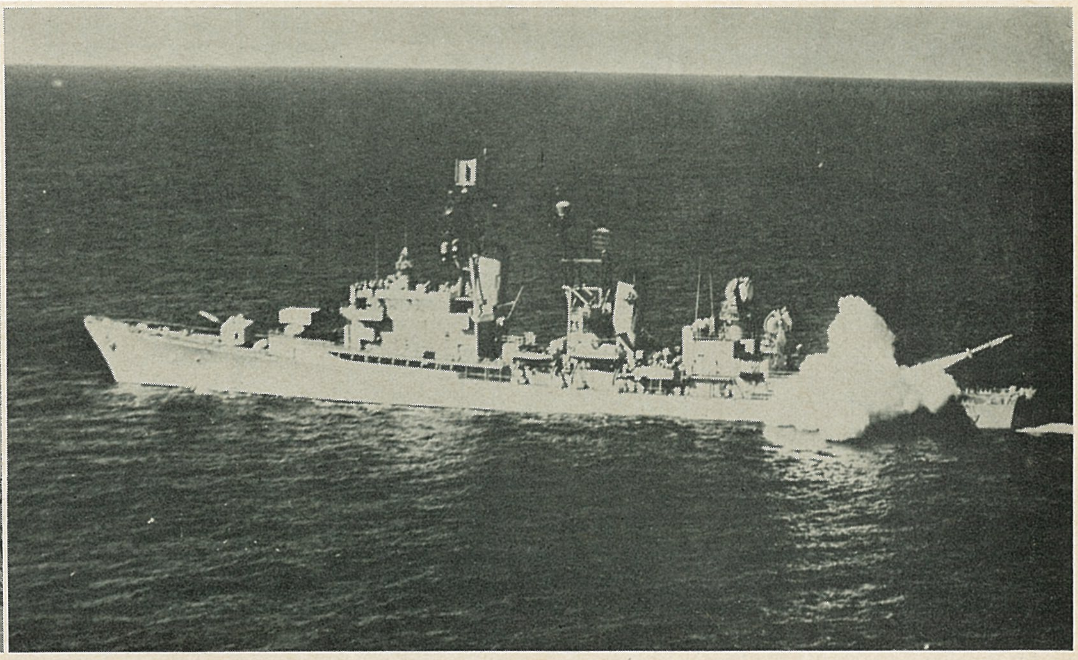
It takes less blood to prime the new version, is easier to assemble and can be resterilized and used again the same day.

The improved machine was manufactured by Hewitt and Faust Mfg. Co. of El Cajon and recently set up in Convair materials and processes laboratory for demonstration.



FIRST SHOWING—Con-Trib committee members see improved "heart-lung" machine in action at SD. From left are E. E. Larsen, Don Pratt of SD materials and processes lab, D. D. Strange, A. D. Parsons, Gladys Story, H. D. Lamb, W. W. Lynt, Emmett Fowler, who coordinated development, Keith Sears, Con-Trib secretary.





TERRIER AWAY—At right USS Dewey (DLG-14) launches Advanced Terrier missile at aerial target astern during recent exercises. Dewey was Navy's first surface ship designed from keel up for guided missiles. At left is scene aboard USS Providence at Long Beach Naval Shipyard when Armed Forces Day crowds inspected Terriers closely. Missiles are product of Pomona Division. USS Dewey is now making good-will tour of European ports.

GENERAL DYNAMICS

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Convair
Palmdale - Holloman
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SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.



ZOOM!—Camera halts this dramatic action as F-106 "B" seat ejects during test over Holloman AFB, N.M. For story and more photos, see page 3. Successful test program was climaxed when T/Sgt. James A. Howell made first live ejection this month.

Club Schedules 'Celebrity Night'; 2,400 Expected

A full house of 2,400 members, wives and guests is expected this Saturday (June 24) at the "Celebrity Night" meeting of General Dynamics/Convair Management Club at Russ Auditorium.



Spike Jones

Star attraction will be Spike Jones and his musical "depreciation" show. Jones and his nine-piece orchestra of musical maniacs will put on a one-and-a-half-hour performance.

A fast-moving business meeting will be highlighted by installation of new club officers, introduction of club scholarship winners, and presentations of the club's top Man of the Year Award, MacSave-it trophies and a special NMA golf trophy.

Tickets for the June meeting, which starts at 7:15 p.m., are now on sale for $1.25 each. They are available on a first-come-and-served basis. Because of limited seating capacity, no tickets will be sold at the door.

Material department, with A. L. Ratz program chairman, is sponsoring the "Spiketacular" meeting. Committee members include George Davidson, Pat Murray, B. W. Rimbach, John Grimes, Bill Liddle, John Richman, Rooney Gavin, Dick Heckl, Earl Kranz, Fred Matson, Norm Grand, Ray Lange, Nick Kosmas, Al Dierker.

Basic Foremanship Course Taken by 135

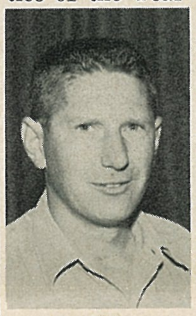
With the conclusion last week of the ninth Primary Conference this year at General Dynamics/Convair, 135 new supervisors in production areas have been introduced to problems and techniques of basic foremanship.

Conducted by management development section of Convair educational services, the 15-hour introduction to supervision is given all newly-named supervisors in production and related operations. Similar inductions for engineering supervision also are arranged.

Lecture-type sessions are scheduled whenever the number of new supervisors reaches 10 or more. Gene Graves of Convair educational services coordinates production supervision courses.

Convair Honors Donald Skorr, Top Apprentice

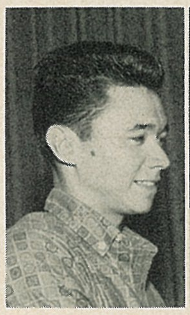
Don Skorr (Dept. 25) has been tabbed as "Outstanding Apprentice of the Year" at General Dynamics/Convair following evaluation of scores of 10 eligibles.



Don Skorr

Runners-up were James E. Terry, also of Dept. 25, and Fred L. Simeth, tool and die apprentice (Dept. 401).

For his outstanding work and school record during his four years in training at Convair, Skorr received a check for $50, and an engraved plaque. His name has been added to the per-



James Terry



Fred Simeth

petual plaque in Convair educational services section.

Terry and Simeth were given certificates and souvenir General Dynamics pocket knives.

Last-year apprentices are judged on proficiency on the job, versatility, grades, attitude and attendance on the job and at school,
(Continued on Page 2)

Holiday Dinners On Menu July 3

Cafeterias at General Dynamics/Convair Plants 1 and 2 will serve special holiday dinners Monday (July 3) for $1 (including tax).

The holiday menu will be swiss steak, potatoes, vegetable, salad, rolls and butter, cherry pie, beverage.

Cost Reduction Group Reformed

Cost reduction group at General Dynamics/Convair was realigned last week with C. H. Hahn appointed assistant supervisor; and systems and procedures personnel were transferred from Bldg. 33 to the second floor of Bldg. 8.

Hahn will report directly to A. E. Andress, manager of systems and procedures and data processing, whose office is now located in Room 27 on the second floor of Bldg. 8.

Andress said the changes were made to consolidate systems and procedures and data processing in the same building and also give cost reduction more emphasis by giving it separate status. Cost reduction group will continue to be located in Bldg. 33.

Other office changes in Bldg. 8 involve W. W. Haas, assistant to controller, who is now located on the west side of Bldg. 8 second floor, and G. O. Withem, chief of data processing, who has shifted into Andress' former office on the first floor of Bldg. 8.

New groups scheduled to move into Bldg. 33 include liaison engineering and liaison action groups, both of which have been located in Bldg. 2.

BLOODMOBILE VISIT SET FOR JUNE 22

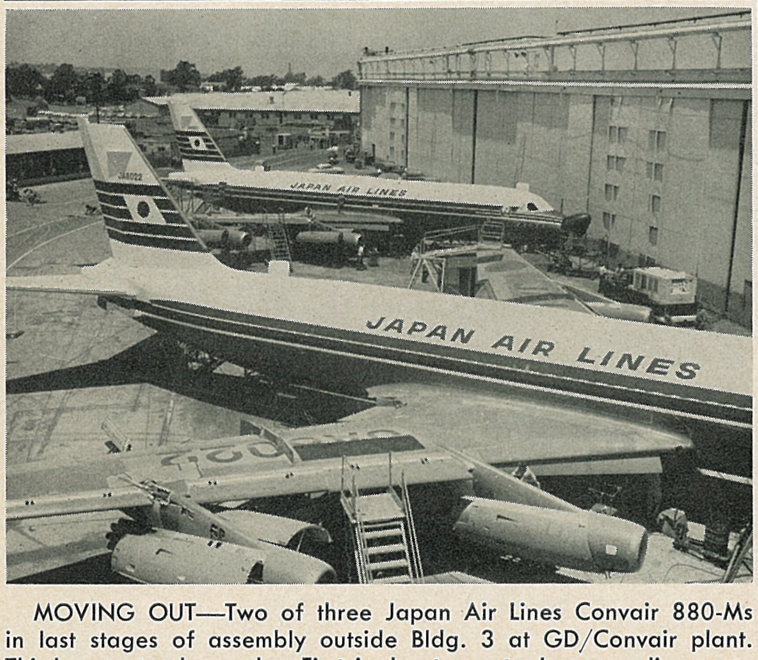
First bloodmobile to visit the General Dynamics/Convair plant in two months will be set up tomorrow (June 22).

It will be located in the military relations conference room in the south end of Bldg. 4 at Plant 1 between 10 a.m. to 2 p.m.

Donors have been solicited from GD/Convair engineering, experimental and General Dynamics/Electronics. However, Ken Wulfemeyer of employee services urges all donors in the plant who are eligible to contribute to report to the bloodmobile location. No appointments are necessary.

W. J. Dewey's Group Shifted to Bldg. 5

Program control administration group of long range planning under W. J. Dewey has moved from offices in Bldg. 1 to second floor of Bldg. 5, west half of area E.



MOVING OUT—Two of three Japan Air Lines Convair 880-Ms in last stages of assembly outside Bldg. 3 at GD/Convair plant. Third now stands nearby. First is due to go to Japanese line some time next month with crews arriving weekly at San Diego on rotation basis for flight training.

Loomis Appoints Famme, Peterson Vice Presidents

Two executives with 45 years of combined company service were appointed vice presidents of General Dynamics/Convair this month by R. C. Loomis, president.

J. H. Famme has been named vice president-operations and E. R. Peterson, vice president-research and engineering.

Famme was formerly assistant division manager-operations.

Peterson was formerly chief of the army weapon systems department at General Dynamics/Pomona. His duties encompass those of W. W. Fox, former chief engineer of GD/Convair who is on temporary leave of absence. Fox intends to remain with General Dynamics.

Famme was born in Baltimore, Md., attended Johns Hopkins University College of Engineering and Baltimore Polytechnic Institute.

After joining Consolidated Vultee in 1936 Famme was project engineer on the B-24 Liberator bomber, XB-46 jet bomber, and XP5Y and R3Y turboprop flying boats. He was placed in charge of the Convair-Liner series in 1951 as chief project engineer and named assistant chief engineer in 1954. In 1958 he became works manager of Plant 2, directing F-102 and F-106 production. He was director of manufacturing development for Convair before assuming the post of assistant division manager-operations in February of this year.

A leading figure in the Society of Automotive Engineers, Famme has served as a member of the national council and as a vice president of that organization. He was given an SAE "Planning for Progress" award in 1960.

Peterson was born in Chisholm, Minn., and attended the University of Minnesota, receiving a bachelor's degree in aeronautical engineering. He has done graduate work in mathematics and servo mechanisms at the University of Minnesota and UCLA.

Peterson returns to San Diego from Pomona Division with a broad background of aircraft and missile engineering, as well as engineering management. He joined the company as a stress analyst in 1941 and worked on the PB2Y-3 and B-24. Later he was in charge of all flutter work on the XB-36 (while on loan to Fort Worth) and performed similar studies on the XB-46, Model 240, 7002 (XF-92). As dynamics group engineer he worked on aspects of many projects, including Lark and Terrier missiles, and transferred in 1952 to Pomona as chief systems design engineer, in charge of technical design of Terrier, including aerodynamics, thermodynamics, structures dy-



E. R. Peterson



Joe Famme

namics and guidance. Later as chief technical engineer he was in charge of all technical groups, plus responsibility for all new business.

Named director of the Mauler program in 1960, he was director of Army weapon systems at Pomona until his new appointment.

Peterson is a member of the Institute of Aeronautical Sciences.

Recent appointments at other General Dynamics Divisions include:

At Astronautics: Mortimer Rosenbaum to executive vice president; Wallace W. Withee to vice president-research and engineering; Elwood D. Bryant to vice president-operations.

At Pomona: Charles D. Perrine Jr. to vice president-research and engineering and G. E. Sylvester to vice president-operations.

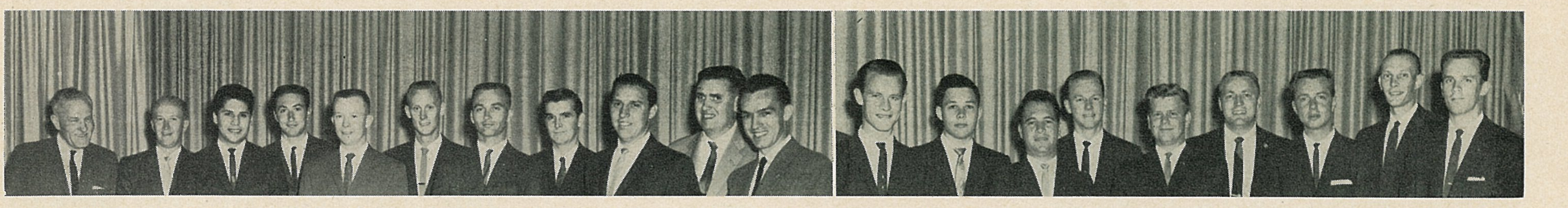
At Fort Worth: Robert H. Widmer to vice president-research and engineering; B. G. Reed to vice president-operations; V. C. Gillon to manager of program planning.

W. J. Martin Shifted To San Diego Post As Manager of QC

W. J. Martin, manager of General Dynamics/Convair operations at Palmdale, has been appointed manager of quality control at GD/Convair, reporting to R. C. Loomis, division president.

Appointment of G. A. Covington as chief of inspection reporting to Martin was also announced.

F. J. Parker has been appointed acting manager-Palmdale operations, succeeding Martin, according to an announcement by J. H. Famme, GD/Convair vice president-operations.



GRADUATES—Eighteen of 23 General Dynamics/Convair apprentices completing four-year program are snapped at annual Apprenticeship Completion Ceremony held June 1 at U. S. Grant Hotel. At extreme left are H. W. Rubottom, chief of Convair educational services and chairman of California Apprenticeship Council, and L. W. Turner, apprenticeship coordinator at Convair. Ceremony is held once a year for all completing training since August, 1960.

Log Book Entries

Service Emblems

CONVAIR

Service emblems due during the period June 16 through June 30.

Thirty-year: Dept. 6-32, T. M. Hemphill.

Twenty-five-year: Dept. 25-9, J. A. Bender; Dept. 400-1, W. R. Atkinson, E. J. Sieck, L. E. Weber.



G. W. Christian, Dept. 120, received his 25-year emblem recently from Joe Famme, Convair vice president-operations.

Twenty-year: Dept. 1-34, Irene I. Wemple; Dept. 3-7, H. W. Rubottom; Dept. 6, F. L. Cook, L. W. Hughes, G. E. Putness, W. H. Schaefer; Dept. 21, S. K. Saunders; Dept. 25, Lawrence Brown, E. M. Franzel, J. E. McInnis; Dept. 31, E. D. Booth; Dept. 102, W. U. Gatterman; Dept. 129, C. O. Byarlay, L. W. Stamper.

Dept. 135, Amedeo D'Ercole; Dept. 138, Jean L. Miller; Dept. 140, C. W. Clark; Dept. 197, G. R. Bailey; Dept. 215, H. A. Rasmussen; Dept. 400, Frederick Leonard, Marie D. McGowan, M. J. Welch; Dept. 401, J. E. Olson.

Fifteen-year: Dept. 1-52, S. W. Kerr; Dept. 3-5, Catharine H. Webber; Dept. 6-04, M. P. Stringfield; Dept. 31, N. I. Nilson; Dept. 101, L. V. Malody; Dept. 133, Alice C. Hayes; Dept. 137, M. H. Davis Jr.; Dept. 170, H. C. Beisner; Dept. 188, Doyle Hayworth; Dept. 192, Marie S. Buirch.

Ten-year: Dept. 1-15, Hilda K. Ochodnicky; Dept. 3, J. J. Anzalone, J. E. Lindblade, B. L. Martin; Dept. 6, T. F. Hayes, W. H. Jacobsen, W. W. Johnstone Jr., E. E. Keller, E. R. Leithoff, Bob North, B. A. Pegel, H. C. Roderick; Dept. 14, Bonnie K. McLellan, W. T. Schultz; Dept. 15, Thomas Arsulich, W. J. Golombek; Dept. 25, H. L. Baker, D. J. Buck, G. W. Schwenke.

Dept. 31, Merced E. Arteaga, D. J. Galloway, J. A. George, G. L. Seyler, Nathaniel Steele; Dept. 44, Katherine S. Boyer, J. A. Cleghorn; Dept. 45, Marjorie M. Sabin; Dept. 46, M. D. Myers Jr.; Dept. 69, R. E. Attlesey, M. O. Duncan; Dept. 115, D. M. Boyer; Dept. 116, Loria C. Lawson; Dept. 120, Adalene J. Kelso.

Dept. 128, Angilina Cappelletti; Dept. 129, Rebecca D. Leavell; Dept. 133, Matilda Monk; Dept. 139, T. E. Baker; Dept. 142, J. M. Branson, F. W. Brown, F. E. Murray; Dept. 145, B. M. Enriquez; Dept. 171, F. M. Hiben, G. E. Martin; Dept. 190, G. Elmore, C. V. Stromberg; Dept. 192, Ann Z. Waidler; Dept. 197, E. E. Weire; Dept. 206, J. M. Barreras.

Dept. 215, F. J. Lutke, Doris P. Wallace; Dept. 223, L. C. Hamiel; Dept. 279, W. J. McQueen; Dept. 288, Sybil D. Watkins; Dept. 292, R. L. Pharr; Dept. 400, H. W. Erickson; Dept. 401, A. L. Archuleta; A. S. Brown, M. V. Gerard, R. Z. Gutierrez.

G/D ELECTRONICS

Ten-year: Dept. 5, J. A. Tucker; Dept. 6, Addie P. McGee; Dept. 9, Dorothy L. Wilson.

PALMDALE

Twenty-year: Dept. 328-3, H. L. Brown.

Retirements

CONVAIR

CRICK—Melvin H., Dept. 31. Seniority date Sept. 22, 1952, retirement effective June 2, 1961.

McJOYNER—Ernest M., Dept. 233. Seniority date Jan. 22, 1936, retirement effective March 3, 1961.

PASSANO—Leonard W., Dept. 6-41. Seniority date Aug. 7, 1951, retirement effective June 7, 1961.

SMOOT—Stella V., Dept. 129. Seniority date April 28, 1947, retirement effective June 2, 1961.

WHEELER—George F., Dept. 401. Seniority date Jan. 13, 1949, retirement effective June 3, 1961.

Lost & Found

CONVAIR

LOST—Lady's watch, white gold with small square face and stretch band, last Wednesday morning between rider-driver parking lot at Overpass 2 and inside Plant 1. Finder please call Gloria, ext. 1548, Plant 1.

At Last! Geo. Friel's OWN Photo Appears!

When George J. Friel, Dept. 201 assistant foreman, received his 25-year pin April 21 a cameraman was on hand to record the ceremony. However, the film was defective and on May 16 presentation was reenacted for benefit of pictures. However, when the photos finally appeared in **Convairiety** of June 7 an engraving foul-up, (rare, but it does happen) resulted in a head photo of W. D. Reed appearing instead. Judging from the telephone calls **Convairiety** received as a result, we are not only widely read beyond our wildest dreams, but Friel and Reed have enough friends between them to elect a mayor!



George Friel

Promotions

CONVAIR

Promotions to or within supervision effective June 5.

Dept. 15-3, Customer Service: To service parts provisioning supervisor, C. B. Robinson.

Dept. 98-7, Office Services: To office services asst. supervisor, E. Capossere, L. S. Elstrom, D. E. Howe.

Dept. 129, Trim: To asst. foreman, D. E. January.

Dept. 138, Jet Transport Forward Fuselage Primary: To foreman, J. W. Magnuson, M. F. Valin.

Dept. 142, Jet Transport Wing Skin & Stringer Panel Assemblies: To asst. foreman, E. S. Slovacek.

Dept. 146, Jet Transport Wing Primary & Wing Mate: To foreman, W. C. Roberts. To asst. foreman, M. R. Burns.

Dept. 148, Jet Transport Major Mate: To foreman, J. E. Cassidy, J. R. Morey Jr. To asst. foreman, H. A. Anderson, W. C. Chandler, N. A. Graham Jr., F. D. Hughes, M. D. Larson, R. P. McGhen, R. D. Witt.

Dept. 160, Jet Transport Final Assembly: To foreman, C. F. Clark. To asst. foreman, K. E. Bowers, M. Dominguez, J. F. Schaefer, B. Smolk.

Dept. 171, Field Operations: To foreman, V. A. Brown. To asst. foreman, E. L. Ettel, F. A. Henry, J. V. Leras, G. E. Martin.

Dept. 180, Proofing Mockup: To asst. foreman, J. W. Brett, P. J. Estrada, G. R. Tiemann Jr.

Dept. 192-4, Manufacturing Control, Plant 1: To M/C asst. foreman, G. C. Mussen, D. Ramsey.

EDWARDS AFB

Dept. 318-3, Jet Transport Flight Test Operations: To asst. foreman, W. A. Morris, G. O. Spencer.

GD/ELECTRONICS

Dept. 7, Material: To manager of material, W. D. Pitts.

Births

CONVAIR

AUSTIN—Daughter, Deborah Lynne, 8 lbs., 8 oz., born June 3 to Mr. and Mrs. Robert E. Austin, Dept. 145.

BRYANT—Son, Vincent, 8 lbs., born June 14 to Mr. and Mrs. Lacy Bryant, Dept. 25.

MAHFET—Son, Joseph Thomas III, 8 lbs., 9 oz., born June 9 to Mr. and Mrs. Joseph Mahfet Jr., Dept. 91-7.

PRINSTEINER—Twin sons: Robert Glenn, 7 lbs., 4 oz., and John David, 6 lbs., 11 oz., born May 27 to Mr. and Mrs. Robert Prinsteiner, Dept. 138.

WILSON—Daughter, Jeanne Marie, 7 lbs., 7 oz., born June 13 to Mr. and Mrs. R. T. Wilson, Dept. 6.

Deaths

CONVAIR

VERDUGO—Edward V. Jr., Dept. 120. Died June 12. Survived by wife, Alice; parents, Mr. and Mrs. Edward V. Verdugo Sr.; two brothers; three sisters.

Personals

CONVAIR

My sincere thanks to my many friends at GD/Astronautics and GD/Convair who remembered me with cards, flowers and kind wishes during my recent illness.

James Fowler, Dept. 545-7.

* * *

The family of Harry L. Belew, formerly Dept. 325 Palmdale, will always remember the kindness and sympathy of Convair friends.

Marie Belew.

Test Personnel Moved at SD

Engineering flight test personnel at San Diego have moved back home again to Bldg. 5, Plant 1.

In a three-way reshuffle of engineering groups 168 engineering flight test people were relocated from the second floor of Bldg. 4 into sections on third floor of Bldg. 5. Administrative offices of V. L. Allwardt, chief engineering flight test; Harold K. Cheney, engineering staff scientist; Don Germeraad, chief engineering flight test pilot; and FAA certification are along the south aisle. All others are located in adjacent sections, 5-3B and 5-3-D. Phone extensions remain the same.

Engineering flight test had been in Bldg. 4 the last year and a half, moving there in fall of 1959 from Bldg. 5.

Moving out of the Bldg. 5 area were 122 propulsion design engineers now located in sections 51-3-A and 51-3-D on the third floor of Bldg. 51, explained Emmett Fowler, supervisor of engineering facilities. A smaller group, 33 advanced electronic systems engineers, were moved last month from the second floor of Bldg. 51 to the Bldg. 5 third floor.

525th Singled As Best FIS

F-102-equipped squadron based at Bitburg Air Base, Germany, has been named the most effective and outstanding squadron in the 86th Air Division, USAFE, for the third time.

A special trophy was presented recently to the 525th Fighter-Interceptor Squadron at Bitburg by Col. Robert J. Rogers, 86th commander.

The 525th was one of four fighter-interceptor units of the 86th Air Division to compete for the distinction during the first quarter of 1961, said J. C. Morris, Convair field service representative at Bitburg. The squadron had accumulated the most points for training accomplishments, exercise summaries, operational readiness, and flying hours.

Convair F-102s went to the Germany-based squadron in early 1959 and were the first F-102s to be based with units abroad.

S. K. Chamber's Son To Attend Academy

Keith S. Chambers, 17-year-old son of General Dynamics/Pomona's S. K. Chambers (Dept. 7), has been accepted as a midshipman by the U. S. Naval Academy at Annapolis, Md.

Keith, an honor student who graduated this month from La Puente High School, received his appointment from former Congressman George A. Kasem on the basis of competitive examinations. He reports to the Academy June 28.

More Than Score of Apprentices From GD/Convair at Ceremony

Twenty-three apprentices from General Dynamics/Convair were among more than 200 honored at the 20th annual Apprenticeship Completion Ceremony June 1, marking culmination of their apprenticeship training.

Dinner and ceremony in the Palm Room of the U. S. Grant Hotel was held under joint sponsorship of San Diego General Apprenticeship Committee and the 27 individual trade committees assisted by California Division of Apprenticeship Standards, San Diego City Schools, and Federal Bureau of Apprenticeship and Training.

Student body of San Diego City College, where apprentices completed their technical training, was host to the new journeymen.

All GD/Convair apprentices will have completed their four-year training program by August of this year. They will have finished 8,000 hours of on-the-job training and at least 576 hours classroom instruction at San Diego City College, explained H. W. Rubottom, chief of Convair educational services and chairman of the California Apprenticeship Council.

Rubottom presented certificates of meritorious service to several committee members who had served five years, including N. D. McFarland of Dept. 25. McFarland is a member of the two GD/Convair Joint Apprenticeship Committees.

New General Dynamics apprentices at Convair and their respective fields are: aircraft tool and die maker and jig builder—Marvin W. Bauman, Lawrence A. Broekemeier, William M. Cullum, Roger A. Dierking, Joseph F. Franca, Eugene W. Pacheco, Mark B. Patton, Frederick L. Simeth, Martin A. Stuhler, Clarence E. Wright.

Electronic technician—Ronald V. Beitz, Robert K. McLeod, Dick L. Vopat, Gene A. Webster. Aircraft construction mechanic—Ruben Villanueva. Aircraft electrician—Jack D. Powell, Richard L. Wilson. Aircraft and engine mechanic—Ronald V. Bedgood, Theodore D. Fritzges, James H. Hamann, Arnold R. Southard. Plaster pattern maker—David B. Noe, Frank E. Sladek.

★ ★ ★

LT. COL. ATTERHOLT NOW CHIEF OF SD AIR PROCUREMENT

Administration of Air Force contracts at General Dynamics/Convair will continue to be serviced by the Air Force office on third floor of Bldg. 19.

Lt. Col. Charles W. Atterholt, former Air Force Plant Representative at GD/Convair, who was named chief of the San Diego Air Procurement District this month, emphasized that AF contracts at GD/Convair will continue to be administered by the Bldg. 19 office.

Staffed by 27 persons, the group maintains surveillance over GD/Convair contracts for the Air Force in areas of contract administration, production, quality control, and industrial property accounting.

Also continuing to maintain offices in Bldg. 19 is the Air Force engineering support group headed by Maj. Milton A. McAuley. This group is under authority of San Antonio Air Materiel Area.

Atterholt assumes duties at the district office which administers all AF contracts in San Diego and Imperial Counties, except those at General Dynamics/Astronautics.

The district office has been in operation since 1953 and employs 150 civilians in addition to three Air Force officers.

Summer Education Data Made Available

Information and catalogues on courses at San Diego schools for summer sessions and the fall semester are available to General Dynamics/Convair people at all educational services offices.

Courses offered and class schedules are on hand at the following San Diego locations: Bldg. 15, ext. 491; Bldg. 51, Room 378, ext. 1827; and management development section, Bldg. 16, ext. 1548. Any member of the educational services staff may be contacted for counseling.

Material has been supplied by San Diego State College, California Western University, University of California Extension, University of San Diego, and San Diego City College.

Convair Honors Top Apprentice

(Continued from Page 1)

leadership potential, off-the-job achievements.

Appointed by H. W. Rubottom, chief of Convair educational services which directs the apprenticeship program, to select "Outstanding Apprentice" was a subcommittee of the Convair Joint Apprenticeship Committee. Serving as committee members were L. W. Turner (apprenticeship coordinator), chairman; K. D. Fawcett, advisory member representing San Diego City College; L. F. Kruse, General Dynamics/Electronics; J. F. Young (Dept. 401-4); L. F. Thornbrugh (Dept. 31); J. B. Evans and L. R. McEntee, both of Dept. 25; and H. Washington, retired from Dept. 401, honorary member of the Joint Committee.

REPORT WRITING CLASSES TO OPEN

Two classes in "Report Writing" for inspection supervisors at General Dynamics/Convair opened last week at Plant 1.

The course, designed especially for quality control, will run 4½ hours a week for three weeks to total 18 hours. By scheduling two classes simultaneously, more students can be accommodated on an accelerated basis in the special program, explained R. H. Nall, management development supervisor of educational services.

Instructing the supplementary courses are Ed Bill of Dept. 15-6 and Max Frank of Dept. 5, GD/Electronics.

Such programs to fill specific needs of any group within Convair can be arranged through educational services department, said Nall.

Delta Ad Program Includes Jet 880

Convair 880s are sharing in the publicity of a massive Delta Air Lines multi-media advertising campaign which is introducing the airline's southern transcontinental service to and from California.

Heaviest broadcast effort was bulked in Los Angeles, employing six radio stations for saturation coverage and supported by frequent television spots. The campaign is costing more than $500,000.

Convair 880s are being utilized by Delta on flights between Los Angeles and Atlanta, with stops in Dallas-Fort Worth and New Orleans.

★ Convairiety ★

Founded Sept. 1, 1948. Published in six editions (Fort Worth-Daingerfield, Convair (Palmdale-Holloman), Astronautics, Astronautics Off-Site, Pomona and the Mail). Logan Jenkins, editor-in-chief.

Approximate current total circulation, over 70,000. News items and letters to the editor are solicited, but no advertising can be accepted.

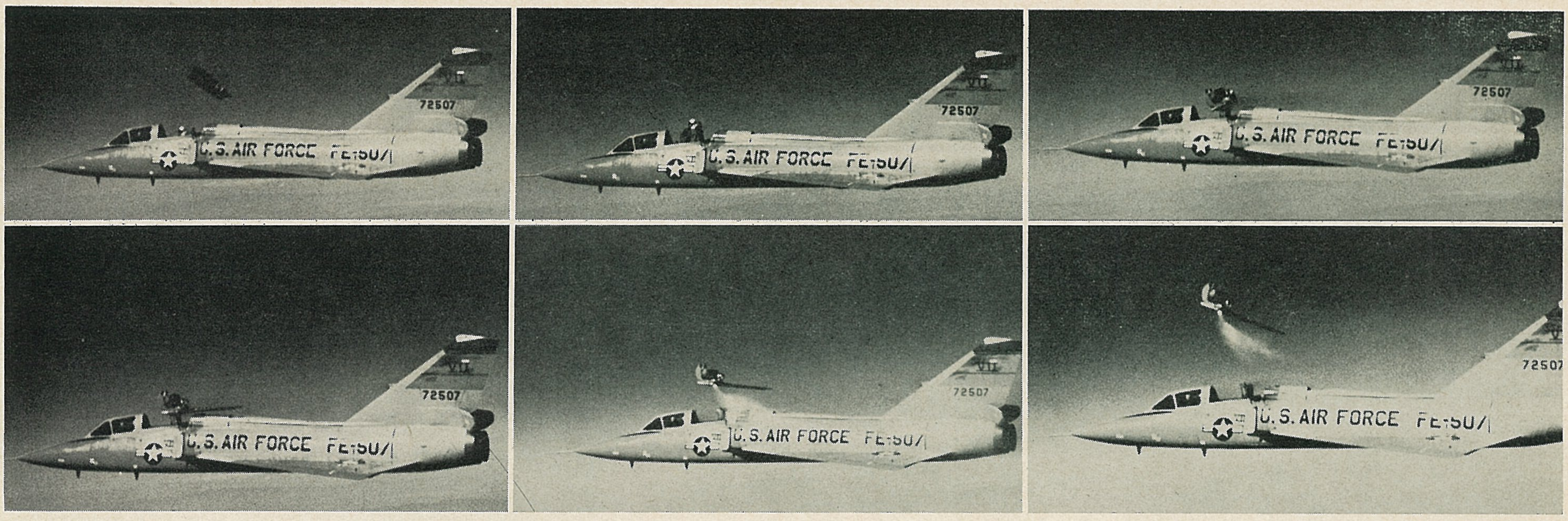
SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Fred Bettinger, news editor; Grayce Fath, Helen Pemberton.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, GD/Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.



SEQUENCE—Film frames, shot fractions of second apart, show F-106 supersonic seat ejecting. Canopy is jettisoned first, then seat shoots upward, rotates as twin booms untelescope and rocket boosts airman safely upward. These were taken during dummy ejection prior to T/Sgt. James A. Howell's successful trip. Motion picture cameraman was GD/Convair's Jerry Green, veteran of seat test program. Dummy ejections reached supersonic speed of Mach 1.8 within last year.



"SPACE" SHOT—At top is T/Sgt. James A. Howell, AF parachutist, serious and determined in cockpit of F-106 before ejection in "B" seat. Below are combined AF and GD/Convair men from both San Diego and Holloman AFB, N.M., at successful conclusion of F-106 escape system testing.

'Real Smooth' Says Howell After F-106 Seat Ejection

A midair "spread eagle" signaled "all's well" as the first man ejected from the F-106 supersonic pilot escape system floated to earth June 6 at Holloman Air Force Base, N. M.

T/Sgt. James A. Howell, veteran of 400 jumps, exclaimed, "It was wonderful—a real smooth ejection!" as he was met on the ground by a team of General Dynamics and Air Force men supporting the first live ejection.

And "real smooth" was the term used to describe the entire test by GD/Convair personnel at Holloman. The first ejection by a human was called an "unqualified success."

T/Sgt. Howell, assigned to 6511th AF Test Group (Parachute) at El Centro, Calif., was ejected from the aft cockpit of an F-106B piloted by Maj. G. D. Hendrix, AF project officer. Zero time was 6:33 a.m. with the plane traveling near a speed of 545 mph at 22,000 feet altitude.

Howell, strapped in the seat, zoomed to a couple of hundred feet above spot of ejection before beginning the descent. Time from triggering of seat to point at 15,000 ft. where he was pulled from the seat by drogue shoot was clocked at 40 seconds!

He said he felt no discomfort at any time, either from blast-off of the rocket that shoots the seat from the plane, or from the wind as he hurtled out into space. "It felt as if I was just gently picked up and thrown out of the plane. It happened too fast to have much sensation of any kind."

In the new escape system concept, pilot and seat are propelled vertically from the cockpit, then rotated to a horizontal position to protect the pilot from wind forces. Booms extend on either side of the seat back to stabilize it. When clear of the plane, seat harness is released automatically and a drogue chute pulls the pilot from the seat. This sets off a timer to release the large parachute to bring the pilot back to earth.

Observers in helicopters were reassured by Howell's wide "spread-eagle" signals during the ten minutes or so it took him to swing to the ground. He landed with a quick roll within a few hundred feet of a predetermined landing spot, about 35 miles northwest of Holloman.

Said Howell at his debriefing session, "If you have to eject, the B seat is the way to do it!"

The June 6 live ejection followed a series of five dummy ejections in the last few weeks and climaxed over four years of development and extensive testing of the General Dynamics/Convair-designed escape system. Prime responsibility for design and development has been in the mechanisms design group under D. A. Liebel, mechanisms group engineer.



HONORS—L. E. Ottem, right, of GD/Convair Model 8 project office presents T/Sgt. Howell with gold watch from General Dynamics at celebration dinner.

The flight test program was conducted by the GD/Convair flight test group at Holloman under W. B. Piper, assistant flight test group engineer.

Key personnel from Convair who participated in the test program included G. C. Kolsky of mechanisms group who acted as design group coordinator; G. H. Solheid of engineering flight test, test coordinator; Richard Renteria of engineering systems dynamics laboratory, responsible for telemetering; Jerry Green of motion picture section, who photographed the mission from a chase plane; and G. Howell from quality control.

Kolsky and Renteria had been at Holloman the last couple of months during dummy ejections and preparations for the live ejection.

GD/Convair men at Holloman playing major roles in the program included J. D. Darsey and B. L. Murphy, control engineers for the test aircraft; W. R. Arcos, operations engineer; E. R. Holst, on-board photography; A. P. Boudon, responsible for aircraft instrumentation. Key mechanics and inspectors included F. L. Denick, Chet Seahorn, H. Strong, Jerry Foster.

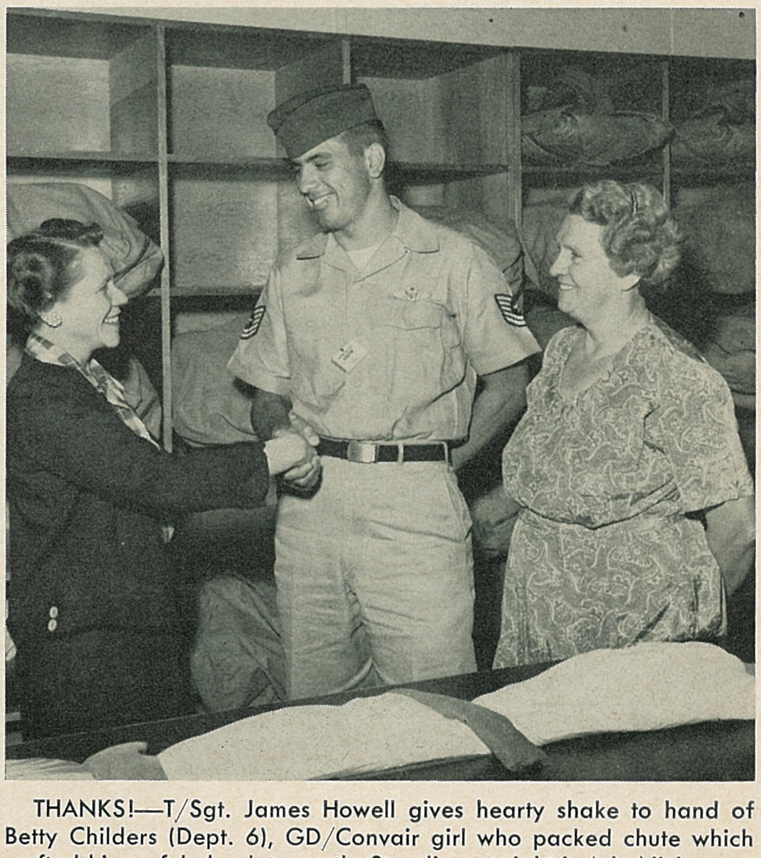
Others on the spot from San Diego during actual test were L. E. Ottem of the Model 8 project office: Liebel; Loren Summers (Dept. 98-8); ground photography; and Stan Mahoney of interceptor service, on special assignment.

Air Force support to the program was provided by personnel of the Aerospace Medical Laboratory and the Aeronautical Systems Division at Wright Field, and by T/Sgt. Howell's own outfit at El Centro.

Supersonic seats now are being installed in all F-106 aircraft. At present nine operational ADC squadrons are flying aircraft equipped with the escape system.

T/Sgt. James Howell was at the Convair plant last week to shake the hand of the girl who packed his parachute, Betty Childers (Dept. 6).

He also was heard last Monday evening on Channel 8's "This Day 1961" when he gave a firsthand account of his experience.



THANKS!—T/Sgt. James Howell gives hearty shake to hand of Betty Childers (Dept. 6), GD/Convair girl who packed chute which wafted him safely back to earth. Standing at right is Ada Nickerson, long-time parachute rigger at GD/Convair.

Nuclear-Power Rockets For Saturn Under Study

Nuclear-powered upper stage rockets for the Saturn space vehicle are being investigated at General Dynamics/Astronautics under terms of a six-month study contract awarded by the National Aeronautics and Space Administration.

Dr. James H. Guill will direct the study at Astro. He has had extensive experience in reactor engineering and nuclear flight programs. Paul H. Sager, Saturn preliminary design leader, is among Astro nuclear technology group members working on the project.

The $112,636 contract was awarded by NASA's George C. Marshall Space Flight Center, Huntsville, Ala., which is responsible for Saturn.

Previously, Astro completed a study of RIFT (Reactor-In-Flight-Test) vehicle for NASA.

Other Marshall Center studies involve nuclear stages in launch vehicle systems, including an investigation of a first stage with thrust of 6 to 12 million pounds being undertaken at Astronautics and elsewhere. Astro is also studying vehicles with a 2 to 3 million pound thrust in the first stage along with other firms.

Results from the three current studies are expected to help outline the future role of nuclear propulsion systems in the area of space flight operations.

J. R. Dempsey, Astronautics president, recently told the House Committee on Science and Astronautics in Washington that:

"Nuclear power is necessary to carry out a wide variety of space missions with greater efficiency, at less cost, and with greater reliability than contemporary competitive chemical systems."

Volunteers Screened For Escape Capsule Loss of Pressure Tests at Carswell AFB

A series of B-58 escape capsule pressurization tests will be conducted in the high-altitude chamber at Carswell AFB in August.

Demonstrations will confirm a crew member's ability to close and pressurize the capsule after being subjected to high-altitude decompression.

"We'll test the crewmen's ability to react to the loss of pressure and close the escape capsule," said Gene Bledsoe, FW senior design engineer. Pressurization builds up automatically when the capsule is closed.

Hand-picked Air Force volunteers are being screened for the series of about 24 tests. Dr. J. L. Judson, GD/Fort Worth aerospace medical specialist, is assisting.

Phase I of the test will simulate decompression to a maximum of 55,000 feet and Phase II to 60,000 feet.



MODEL MODEL—GD/Convair lensmen made most of material on hand at their June 12 shoot with beauteous Delmary Pack (Dept. 6) as model. Bob Reuther (Dept. 31) also posed for shutter bugs. Above shot was taken by Ron Ainsworth.

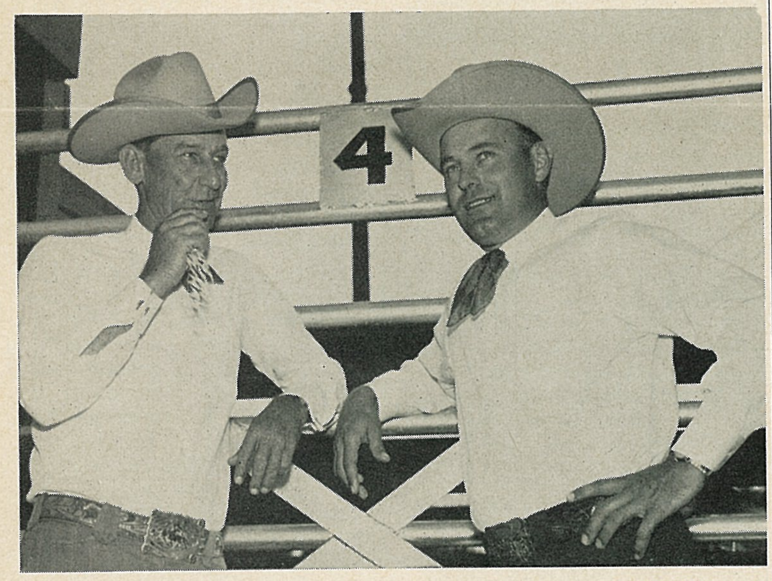
Producers of Week End Rodeos Keep 56 Horses, 100 Head Cattle

Monday through Friday, E. McHood operates an overhead crane in Dept. 20-2 at General Dynamics/Fort Worth and T. M. Smith works as an assistant foreman in Dept. 4-5.

Week ends, they team up as rodeo producers throughout Texas, Oklahoma and Arkansas. The two produced the recently highly successful CRA rodeo.

Smith and McHood first met eight years ago in the old CRA Roping Club on the North Side. Since then they have averaged 40 to 50 rodeos a year.

Their stock includes 50 bucking horses, six saddle horses, 20 Brahma bulls, 35 roping calves, 20 dogging steers, and 20 cows (with calves) for wild cow milking contests. They pasture on 375 leased acres near Weatherford and 260 acres at Arlington.



COWPOKES—E. McHood, left, crane operator at GD/FW Dept. 20-2, and T. M. Smith, assistant foreman in Dept. 4-5, teamed up eight years ago as week end rodeo producers.

Plants Will Close Tuesday, July 4th

General Dynamics Divisions will be celebrating Fourth of July as a one-day holiday this year.

All plants will close Tuesday, July 4, with the exception of departments performing essential maintenance and industrial security functions. Supervision will notify employees who will be required to remain on the job.

Work will be resumed at regular time the next day, Wednesday (July 5).

Traveler Reports On Jet 880 Service

A recent visitor to the General Dynamics/Convair plant had nothing but praise for the Convair 880 jetliner.

Charles Stevens, director of library services at MIT Lincoln Laboratory, Lexington, Mass., said that he has flown in 880s many times—on Delta Air Lines, TWA, and Northeast Airlines routes, and found them the quietest and most powerful of all the jets in passenger service. In his words, "It's a honey!"

Stevens was at Convair this month inspecting the engineering library.

Bossart Meets 'Jr. Scientists'

K. J. Bossart, General Dynamics/Astronautics technical director, was guest speaker early this month at a San Diego Hall of Science and Industry presentation on solid rocket propellants and missiles.

The occasion was part of the "Meet the Junior Scientist" program, and Bossart shared the limelight with John Koethe, high school sophomore who won the boy's sweepstakes division of the recent Science Fair.

Chairman of the "Junior Scientist" program is Alan Fullarton, GD/Astro Dept. 454. Fullarton is also a director of the Hall of Science and Industry, as are Bossart, J. R. Dempsey, Astronautics president, and Werner Schmack, Dept. 547-4.

Memorial Bomber To Face Clean-up

The B-36 Memorial at Carter Field is slated for the annual plant and clean-up job July 15.

B. R. Main, GD/Fort Worth Dept. 20, said about 65 volunteers—both hourly and salaried—will help spruce up "City of Fort Worth" inside and out.

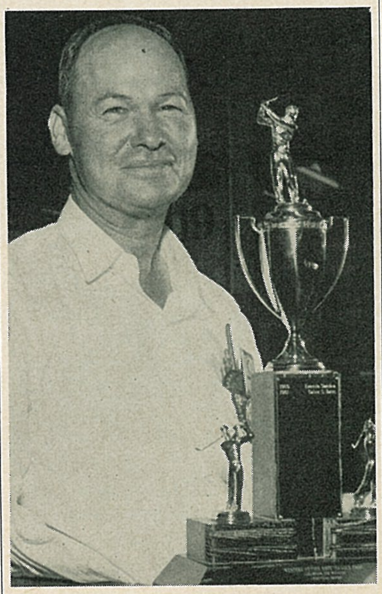
At Long Last

One-Arm Golfer From Convair Tourney Winner

A General Dynamics/Convair man who lost an arm 25 years ago in a train accident walked off with a coveted golf trophy last month.

Calvin Bates, manufacturing control dispatcher at Plant 2, finally had a chance to take an active part in the Western States Amputee Golf Championship after years of making arrangements for the annual event. It paid off. He brought home the impressive perpetual trophy for a low net (a 149 for 36 holes) in the "arm division" from the regional tourney at Scottsdale, Ariz.

Trophies for both leg and arm contenders were donated by Palomar Trophy of Escondido. A third trophy went to low scorer in the championship flight.



PROUD — Cal Bates beams over amputee links trophy.

For several years Bates has spent all his spare time interesting amputees in golf as a morale booster. He took up the game himself in 1949 and five years ago spearheaded organization of the Western States Amputee Golf Championships.

He serves on the executive board of the national organization and as regional representative of the Western area, including 11 states. He is also secretary of the Western States association.

"Golf is one of the best sports for rehabilitation of amputees," said Bates, who explained that he tried the game first as a challenge to himself.

"It makes a person more self-reliant than any other sport. When we can persuade an amputee that he can play a good game of golf, we prove to him that he is not handicapped."

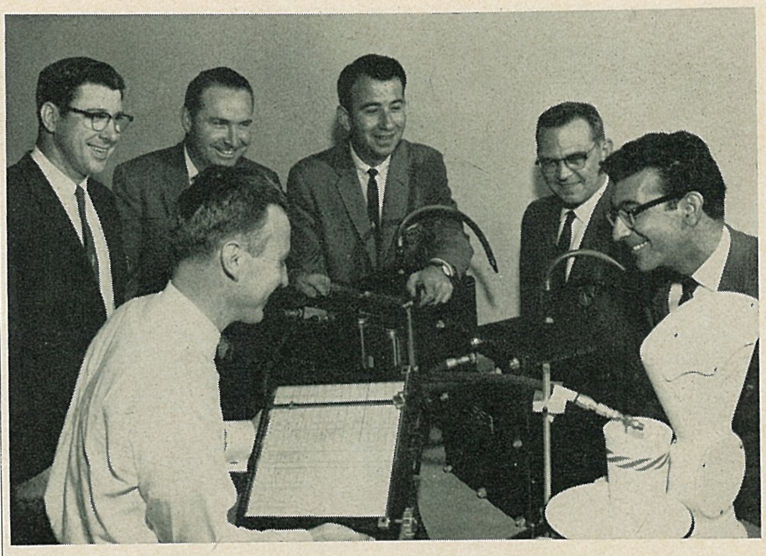
Now Bates is deep in planning for golf clinics in San Diego where amputees can learn and practice. He emphasized that activities of the association are not confined to once-a-year tournaments but are carried on a planned basis the year around. Any amputee is eligible to participate.

RUTLEDGE TO HEAD PHOTO COMPETITION

L. W. Rutledge of General Dynamics/Convair still photo section has been named co-chairman of the program for industrial photographers at the coming convention of Professional Photographers of California, Inc., in Long Beach. He also will act as a judge for the industrial photographic competition.

On the program will be an open discussion of in-plant photography conducted by Ernest H. Boldrick, chief of General Dynamics/Astronautics still photo section, and members of his staff.

Rutledge, past president of Professional Photographers of San Diego County, Inc., also is up for treasurer of the state organization in elections at the July 6-10 conference.



MIXER—Working parts of resin dispenser hold attention of N. D. Baird, C. W. Moon, E. V. Russell, N. L. Jones and A. R. Mosco as H. C. Baker (foreground) demonstrates calculator. Installed device operates like soda fountain.

Soda Fountain-Type Dispenser Mixes Resin 'Recipes' For Astro

A device which bears a strong resemblance to a drugstore soda fountain will soon be in use in General Dynamics/Astronautics' electronic encapsulation laboratory (Dept. 781) in Bldg. 33.

Instead of refreshments, however, the unit will dispense various resins used to mix materials for encapsulating electronic parts for the Atlas missile.

Small electronic assemblies are coated with the hard-drying resin mixture to seal out moisture and fungus and to protect them from vibration.

The new dispenser was designed and built by H. C. Baker, project engineer of applied manufacturing research and process development (Dept. 290-2). For use with it, Baker added a calculator which can supply the "recipe" for any of the more than 25 different compounds used for encapsulation.

Cans of resin are placed in air tight chambers connected to the factory compressed-air supply. When the operator turns a valve, resin from one of several cans is delivered to a nozzle. This is mounted over a direct reading scale on which the mixing container is placed.

"Since no mathematics is involved, there is less chance for error," said E. V. Russell, general foreman, Dept. 780-0. "The dispenser and calculator simplify the entire operation and should result in cleaner work and a considerable saving of manhours."

T. E. Kerr, assistant supervisor, Tom Wright and George Erickson, technicians, all of Dept. 290-2, worked with Baker in developing the prototype.

Engineers at GD/FW Take AWS Offices

Three General Dynamics/Fort Worth engineers were recently elected to offices in North Texas section, American Welding Society for 1961-62.

They are: Jay C. Collins, senior manufacturing research engineer, chairman; R. E. Key, senior design engineer, vice chairman; and D. J. Taylor, manufacturing research engineer, publicity director.

Key said the AWS fall national meeting will be held in Dallas, Sept. 25-28. A tour of GD/FW during the event is being planned.

Membership in AWS is open to anyone engaged in or interested in welding. Further information may be obtained from Collins (ext. 3450), or Key (ext. 3848).

Dr. Ta Li, Scientist, Now Fellow of IAS

Dr. Ta Li, senior staff scientist at General Dynamics/Astronautics, has been named an associate fellow of the Institute of Aerospace Sciences.

A native of China, Dr. Li received his Doctor of Philosophy degree from the University of Munich, Germany, in 1934. He taught in China before bringing his family to the United States in 1947. He has been with Astronautics since 1955.

His scientific work involving the behavior of liquids during periods of zero gravity has been acknowledged widely and accepted for theoretical studies by scientists.

Frank Vining's Daughter Wins 'Fairest' Title

When a General Dynamics/Astronautics daughter was crowned San Diego's "Fairest of the Fair" early this month it climaxed her first venture into beauty contests.

She is Salli Vining, 17, daughter of Frank P. Vining, Astro foreman in major assembly (Dept. 758).

A 1961 graduate of La Jolla High School, Salli was La Jolla's entry in the final judging which brought together representatives of 20 San Diego County communities.

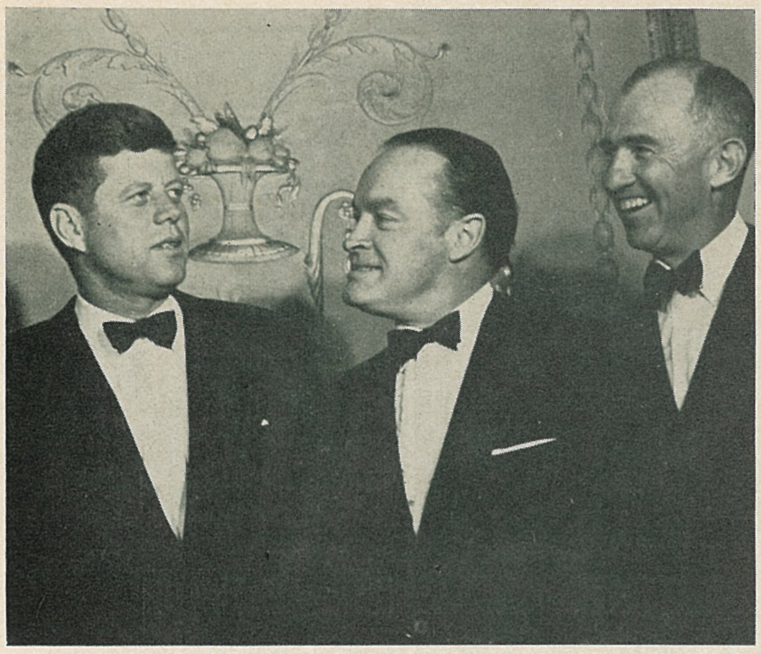
Salli will reign over the Southern California Exposition and San Diego County Fair opening next week; she will serve as official hostess for the San Diego Convention and Tourist Bureau for one year; and she will represent the County in the Maid of California contest during the California State Fair at Sacramento in August. In the fall she plans to enter San Diego State.

The Vinings have four daughters. One is married. Another, Patty, has been accepted for stewardess training by American Airlines. Penny, 10, is the youngest and is a potential beauty winner of the future.



VERY FAIR—Salli Vining, 17, daughter of Astro's Frank Vining, was recently named "Fairest of the Fair" over 20 contestants.

Is It News?
Call Convairiety



DINNER CHAT—President Kennedy, Bob Hope and Frank Pace Jr. met during Eleanor Roosevelt Cancer Foundation dinner May 30 when Pace was general chairman. President was principal speaker.

GENERAL DYNAMICS CORPORATION NEWS

General Dynamics President Earl Dallam Johnson was present at a White House ceremony June 15 as President Kennedy awarded the Collier Trophy to Vice Adm. William F. Raborn for his direction of the Polaris fleet ballistic missile weapon system program.

General Dynamics has played a major role in the program through construction of Polaris-firing nuclear submarines.

Last year General Dynamics shared the award with the Air Force and Space Technology Laboratories for the Atlas program.

★ ★ ★

Wafer-thin "solar sandwiches," designed to convert the sun's energy to electrical power for space vehicles, are now being developed for the U. S. Air Force by General Atomic Division.

The new-concept solar power producer, which consists of a large number of tiny thermo-electric elements placed between two thin metallic sheets, is expected to have marked weight and cost advantages over present solar cell systems in providing auxiliary power for space vehicles. The panels are being developed under a study contract awarded by the Air Force's Aeronautical Systems Division at Wright-Patterson Air Force Base, Ohio.

★ ★ ★

John A. Edwards has been named executive vice president and William A. Runge has been appointed comptroller of Liquid Carbonic Division, John F. Thurston, division president, announced.

As executive vice president, a new position, Edwards will be responsible to Thurston for both domestic and international operations. Edwards formerly was Liquid Carbonic's vice president and comptroller and its chief financial officer for the past ten years.

★ ★ ★

Jerome Kohl, coordinator of special products for General Atomic Division, is senior author of a new book "Radioisotope Applications Engineering."

★ ★ ★

The Navy has named the two prospective commanding officers for its newest Polaris-firing submarine, the Thomas A. Edison.

Cdr. Charles M. Young of Coronado, Calif., a World War II Silver Star winner, naval aviator, and submarine veteran, will command the Edison's "blue" crew.

His counterpart on the Edison's alternate gold crew will be Cdr. Walter Dedrick of Vallejo, Calif., commanding officer of the nuclear-powered USS Halibut and former skipper of USS Tunny, first guided missile submarine.

The 410-foot, 6,900-ton Edison is a second-generation fleet ballistic missile submarine designed to fire the more advanced 1,500-mile Polaris. Like her predecessor FBM submarines, the Edison's blue and gold crews will consist of 90 men and 10 officers each.

★ ★ ★

The world's first commercial swing-tail air cargo plane, the Canadair Forty Four, was delivered May 31 to Flying Tiger line.

★ ★ ★

Function and reliability testing of the Canadair Forty Four swing-tail air freighter has been completed, marking conclusion of the flight test program leading to full commercial certification of the new cargo aircraft.

The Forty Four, which late last month received provisional airworthiness certificates from the Canadian Department of Transportation and the Federal Aviation Agency in the United States, has been ordered by three U. S. cargo airlines — The Flying Tiger Line, Inc.; Seaboard World, and Slick Airways, Inc.

During 18 days of continuous testing under simulated airline operating conditions, Canadair flight test engineers said the aircraft performed more than 50 flights, all virtually trouble-free. As many as six flights were made in one day. These included two nonstop transcontinental trips and a number of other long-stage-length flights.

★ ★ ★

A new metallurgical development and fabrication center will be constructed by General Atomic Division. The new center, to be completed in early 1962 on a 28-acre site in Sorrento Valley, will be adjacent to General Atomic's John Jay Hopkins Laboratory for Pure and Applied Science at SD.

Dr. Frederic de Hoffmann, senior vice president of General Dynamics and president of General Atomic, said the 52,000-square foot facility will be devoted largely to development and fabrication of fuel elements for General Atomic's advanced nuclear reactor systems for central station power generation and for propulsion, as well as for General Dynamics' TRIGA reactors for research, training and testing.

When fully equipped, the center will represent an investment of about $2 million.

★ ★ ★

Victor A. Liston has been appointed Director of Share Owner Relations for General Dynamics Corporation.

Liston was previously with Merritt Chapman & Scott in charge of share owner relations. He has also served as a financial relations consultant with Allied Public Relations and was with the Merrill, Lynch, Pierce, Fenner & Smith publication, Investor's Reader.

Trio in Same Family List Same Birthday

The birth of little Victoria Lynn Elwell on May 30 marked the third generation of Elwell children born on that date. Victoria shares birthday honors with her father Gene, 28, of General Dynamics/Astronautics Dept. 773, and her grandfather Milo, 70.

LIBRARIANS CONFER AT CONVENTION IN SAN FRANCISCO

Librarians from three General Dynamics Corporation Divisions and Canadair, Ltd. were among 1,000 delegates at the national convention of Special Libraries Association in San Francisco May 28-June 1.

Convair was represented by Keith Blair, chief librarian, and Merle Boylan, head of technical processes. From Astronautics were Lou Canter, chief librarian, and Richard Benedict. Roger de Tonnancour, chief librarian at Fort Worth, and Rodolphe C. Lavergne, chief librarian of Canadair, Ltd., completed the delegation.

Blair, as membership committee chairman of the San Diego chapter, accepted award for greatest increase in any group within California. He will serve as treasurer for the San Diego chapter for the next year. Canter is newly-elected vice president.

An article by Blair, entitled "Engineering Library Bulletins—The Human Factors Consideration," was published in the Special Libraries publication for April.

SD CLUB SCHOLAR EDGED BY MOTHER FOR CLASS HONORS

A GD/Convair daughter, holder of a Convair Management Club scholarship, ran into tough competition within her own family for academic honors as she graduated from San Diego State College this month.

Ruth Kramer, a first-place scholarship winner in 1956, was nosed out by her mother, Hannah W. Kramer, who graduated in the same class with high honors in elementary education. Ruth wasn't far behind—she held honors in economics and distinction in her major, also elementary education.

This makes a quartet of teachers in the Kramer family. Ruth's sister, Louise Holloway, and brother-in-law, Bob Holloway, are teachers in San Diego schools.

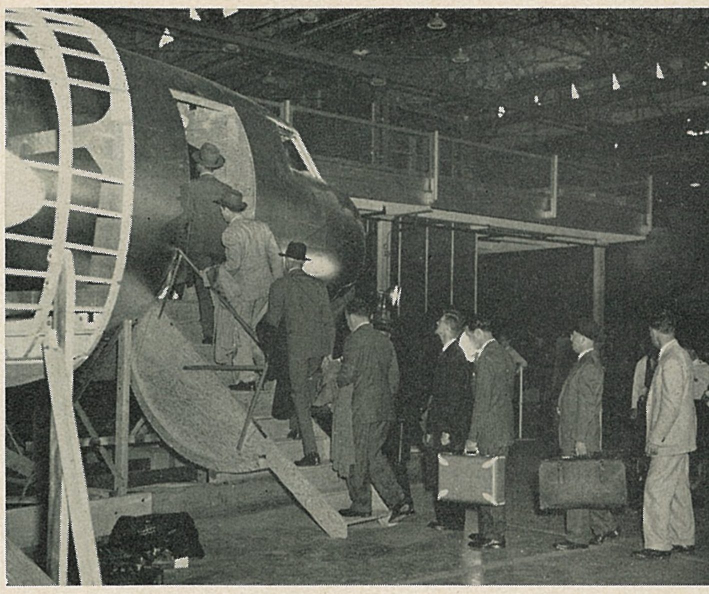
Their father, Raymond L. Kramer, now retired, was in Dept. 250 at the time Ruth won her scholarship.

GD/Astro Will Host Engineer Meeting

General Dynamics/Astronautics will play host to the Institute of Radio Engineers' Professional Group on Space Electronics and Telemetry June 28.

They will meet in the main presentation room, Bldg. 2, at 7:30 p.m. to hear W. B. Harris and I. A. Sofen of RCA discuss micromodularization.

The business session will be preceded by a 6:15 p.m. dinner at the Sands Hotel. Dinner reservations may be made with Bobbie, ext. 2078 or 2079.



BOARDING PARTY—Presumably to demonstrate facilities for luggage aboard Model 240, these "travelers" carry their own aboard mockup at San Diego. Year of photo was 1946.

Post-War Effort

Model 240 Seen as Successor To Douglas' Workhorse DC-3

(This is installment No. 61 of history of Convair.)

At San Diego the immediate post-war effort centered on developing a medium-range twin-engine transport, the 40-passenger Convair-Liner. Planners projected it as a "successor to the DC-3," the remarkable transport Douglas introduced to commercial airlines in 1936 and produced during the war as the C-47.

Once in service the Convair-Liner quickly won worldwide approval for comfort, economy and dependability. By 1956 it was the standard medium-range transport of nearly 40 domestic and foreign airlines. But the birth period was one of severe travail, consuming the company's resources and drawing it deep into debt.

It was realized from the outset that the program would lose money for a time, but it was supported for several reasons: to keep the work force together, develop a commercial market, and offset the reputation of the C-87. (This was a frankly makeshift transport, developed for the Air Force during the 1942 transportation crisis by modifying B-24 bombers.) At this time Convair had an excess profits "carry forward" of $25 million. At the worst, the company could lose this amount on the Liners and suffer a net loss of only $5 million. The program went ahead. Directors believed deliveries would start in mid-1947 and that the first 158 would pay off engineering and tooling costs.

Throughout 1946 and 1947, however, the Convair-Liner was beset by rising costs and unforeseen delays. Engineering and tooling charges climbed over $13 million. Other manufacturers were having the same trouble. After surveying the industry in 1947, the Congressional Aviation Policy Board concluded: "The cost of design and prototype development . . . is so high that neither the manufacturers nor the air carriers can today afford to invest the sums involved."

Early orders for 120 planes were placed by two lines, American and Western, but the commercial sales staff found tough going thereafter. Many carriers wanted new equipment but few could finance it. Competition with the rival Martin 202 had adverse effects and Convair underpriced its merchandise (less than $200,000 a piece on one order) and succumbed to "versionitis" (the major modification of a basic design to please a customer). One customer wanted the self-contained stairway forward, another aft, a third wanted it omitted.

Using wartime factory production curves, the company had concluded that Liners could be built with fewer than 30,000 manhours of direct labor. Redesign, to meet unforeseen CAA requirements, material shortages, a 101-day strike in 1946 and other factors revised the estimate to 55,000 hours by 1947. The final cost on the original production run of 168 Liners was 68,000 hours per plane. (Later, of course, this was brought into line. In 1955 the enlarged Model 340 was being built with 32,200 direct manhours.)

The prototype Model 110 (first flown in July, 1946) and the production Model 240 incorporated many refinements. The cylindrical fuselage was pressurized, permitting the Liner to fly comfortably at economical altitudes. A self-contained hydraulic stairway let the plane load and discharge passengers without assistance from the ground crew. The cabin heating system was engineered to eliminate a common airliner nuisance, drafts. Professional airline pilots were consulted on arrangement of the cockpit.

Once design and production difficulties were overcome, the Convair-Liner program began to roll. Deliveries totaled 94 in 1948. By 1956, the 10th anniversary of the Model 110, more than 1,000 of the planes had been produced in commercial and military versions. Convair estimated the Liners had flown 13 billion passenger miles, claimed for them "the best safety record of any commercial aircraft." On the 44-passenger 440 Metropolitan, brought out in 1955, the direct operating cost was only 1.79 cents a seat mile on a typical 165-mile flight.



"You do deserve credit, Harold, for working 5,000 manhours without lost time from bodily injury but that doesn't give you the right to refer to the rest of us as 'the rank and file.' "

SOCIETY HEARS FW ENGINEERS

Two General Dynamics/Fort Worth manufacturing research engineers spoke at a recent meeting of North Texas Chapter, American Society of Tool and Manufacturing Engineers. Topic for J. L. McDaniel and W. R. King was "High Energy Rate Forming."



RANDOM SHOOTING—"Random" applies not only to picture shooting but to golf as well. Scenes are at Mission Valley Golf Club where Astro Twilight League marksmen compete. Play started May 1 and will last for nine weeks, plus playoffs, That's T. R. "Tom" McColloch retrieving ball from water hazard.

Men Out-talk Women To Win Back Trophy

Women came out second best in a "King and Queen" return match pitting Convair Toastmasters and Delta Toastmistresses in a speaking bout last week in Convair executive dining room.

"The Female Animal—Is She Normal?" rang the bell for Fred Stevens, GD/Electronics, speaker for the male contingent. His humorous talk retrieved the best speaker's trophy, captured by Toastmistresses at the first combat this spring. He chose his subject in answer to the ladies, who won last time with "The Man—Is He a Rational Animal?"

About 70 spectators, all members of Delta Toastmistresses, host club; Convair Toastmasters; and Mt. Helix Toastmasters, enjoyed the lively overtime speaking contest. Two from each club competed at the mike for the audience's favor.

Sunny Cooper (Astro AF office), president of the Convair and Astro women's group, and Pam Gray, wife of Astro's W. A. Gray, as vice president, were in charge of arrangements for the joint dinner meeting.

Convair Toastmasters will be joined by Gavaliers, airline personnel group, for their second combined meeting this year next Monday (June 26) in the executive dining room. The speaking organization is open to all General Dynamics men at San Diego facilities.

HUNTER SAFETY CLASSES SLATED

New hunter safety classes begin this Saturday (June 24) at Gillespie Field Clubhouse.

The first class is nearly full, said Arnold Schrock, instructor of the continuing courses, so all planning to take the course are urged to make reservations before reporting. Schrock will take applications at BR-7-4958.

Sponsored by CRA, the course runs for three Saturday mornings. Instruction is given in the handling of .22 rifle and shotgun for young people under 16 years. They then can obtain hunting licenses in California.

Three complete courses will be given before hunting season opens in September.

GD Sons, Daughters Active in Orchestra

Young instrumentalists whose parents are connected with General Dynamics divisions in the San Diego area are reminded that auditions for membership in the Civic Youth Orchestra will be this week end.

Tryouts will be conducted June 24-25 at Mt. Miguel High School for both the Civic Youth Orchestra and its Training Orchestra. Audition appointments are being taken by Mrs. H. W. Rubottom, HO-6-8144.

Already numbered among the membership of the 85-piece symphony orchestra are at least 14 sons and daughters of General Dynamics employees.

Please Play Safe On July 4 Holiday

To come back alive after a happy Fourth holiday General Dynamics/Convair people are urged to observe simple safety rules, said M. C. Val Dez, chief safety engineer.

Seat belts are the best insurance against injury and possible death in case of accidents, he said. "Belts are important whenever driving, even at low speeds. Remember, too, most accidents occur within 25 miles of home. Whether planning a nearby trip or making a nearby visit, buckle your belt.

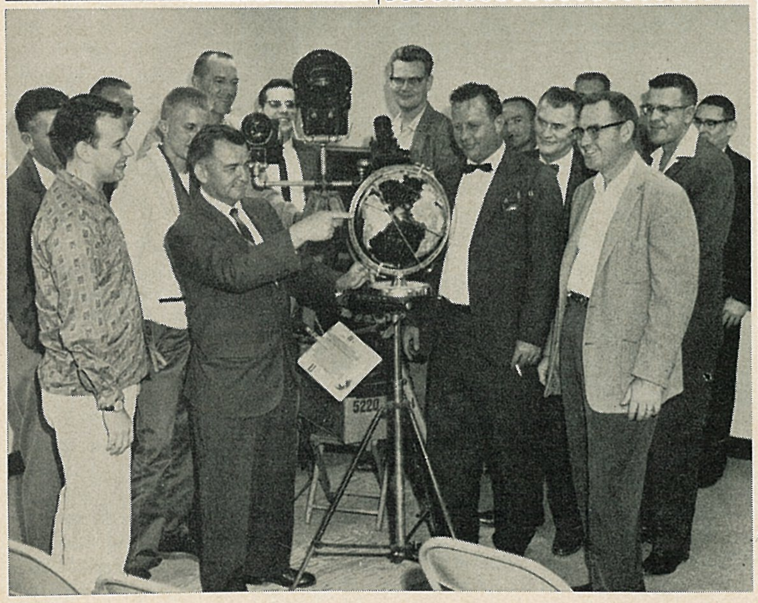
"Also, if you go to the beach take every precaution that a water emergency does not occur. Drownings are not confined to little children or teen-agers."

Saturday Schedule For Salvage Yards

Astronautics and Convair people may shop at salvage yards at the two plants on the following Saturday schedule:

Convair—June 24, July 8.

Astro—July 1 and 15.



PASSES HERE—Tom Hemphill, Convair engineer and volunteer satellite tracker, points out path of Echo satellite on globe for members of Astro Radio Club. Hemphill spoke and showed items of equipment used at group's May meeting.



MANY THANKS — Bud Davies presents skating star Janet Champion with inscribed desk set in appreciation for special skating exhibition she staged recently for Convair and Astro Ice Skating Clubs.

Follies Skater In Exhibition

An appreciative audience of more than 150 persons viewed a solo skating exhibition by Janet Champion, Ice Follies star, during a recent meeting of Astronautics and Convair CRA Ice Skating Clubs.

The exhibition was an added feature of the club's regular weekly skating session at Iceland, 6055 Lake Murray Blvd.

As a token of appreciation, Bud Davies, Astro CRA commissioner, presented Miss Champion with an inscribed desk set from the combined clubs. Afterwards Davies was host at a reception for the star at his home. Movies of Ice Follies from 1959 through 1961 were shown.

The CRA Ice Skating Clubs meet at 6:30 p.m. each Thursday at Iceland, when free instruction and special events are featured at group rates. Interested employees may contact Davies at Astro ext. 3441, or Martha Woodberry, Convair CRA commissioner, at Convair ext. 1245, Plant 1.

Variety of Articles In Lost and Found

Lost and found at Convair employee services counter, Bldg. 32, Plant 1, has accumulated a variety of articles waiting to be claimed.

People within the plant who have lost something are asked to check lost and found so that the supply on hand can be returned to rightful owners.

GD Son, 16, Outshoots Men To Win Archery Championship

A General Dynamics Corporation son is rapidly building a reputation as a modern day "William Tell." He is Terry Yale, 16, son of Betty (Astronautics Dept. 331-1, Plant 2) and C. A. "Skip" Yale (Convair Dept. 25).

Two years ago Terry developed a casual interest in bow-and-arrow activity. When he came home with honors in the International Archery Championship at Tijuana his first year out, his enthusiasm was confirmed.

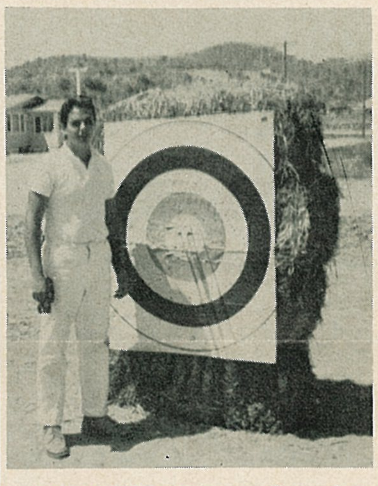
Now a dozen trophies line a shelf in his room, including one naming him winner of the intermediate division of the National Indoor Archery Championship.

Beside it is another from the recent Long Beach City Championship where Terry faced an unusual problem: arriving for the contest, he learned there was no provision for intermediate shooters. His only alternative was to fire against men's class "B" competition.

Terry finished first in the class.

The young champion's hobby has spread to the rest of his family, and now his parents and two sisters have joined him in the sport.

"The rest of us shoot for fun, though," explained Betty Yale. "Terry's the one who wins the trophies."



SHARPSHOOTER — Starting with casual interest two years ago, Terry Yale, 16, shown here, has developed championship archery form.

GD Son Gets Study Grant

Carlos A. Richardson III, 16, son of Carlos Richardson Jr., GD/Convair Dept. 6 now working with Dept. 321 at GD/Astronautics, has been selected for a special summer science program.

He is one of 40 high school juniors chosen for the Atmospheric Sciences Program sponsored by the American Meteorological Society at The Loomis School, Windsor, Conn.

Students were selected from 120 applicants from throughout the nation on the basis of scholastic standing and college board examinations this spring. The program consists of a six-week lecture course including research in atmospheric science projects. It is operated under a grant from the National Science Foundation.

Carlos is an honor student at Kearny High School, and a member of the school's track team.

137, ROSE CANYON TOP SHOP SOFTBALL

Convair plant softball play passed the halfway mark in the first round last week with Dept. 137 and Rose Canyon tied for the top spot with identical records of 4 wins, 1 loss.

Other team records, including games played through June 12, are Electronics, 3½-1½; Dept. 135, 2-2; Dept. 97, 2-2; Dynamics, 1-3; Material, 1-4; Dept. 400, ½-3½.

Dept. 137 strung together four straight wins before losing to Electronics 5-2. Rose Canyon's only defeat in its first five games was to Dept. 137, 11-4.

Final games in the first round will be played June 26 and 30.

Swing Keg Leagues Still Being Formed

Summer swing leagues are still being formed for Convair keglers, said Jim Hayman, commissioner.

Anyone on second shift interested in daytime bowling is urged to call Mike or Frances Brooks at HO-9-8793.

DAUGHTER REAPS ACADEMIC AWARDS

Sylvia Lane Andres, daughter of Leonard Andres of General Dynamics/Convair Dept. 146, finished her high school career reaping awards for her scholastic record and specialization in science.

She received a four-year scholarship to San Diego State College from the California Scholarship Federation, together with a life membership, at graduation last week from Kearny High School. She also won the Bank of America Achievement Award in science.

Last month she won a first place and an honorable mention on two scientific papers entered in the Navy Electronics Laboratory technical writing symposium.

GD Divisions Plan Apprentice Booths

Apprenticeship programs at both General Dynamics/Convair and General Dynamics/Astronautics will be visually publicized at the coming Southern California Exposition and San Diego County Fair June 30-July 9.

Each division will have large booths, 12x12 ft., in the apprenticeship display located near the main entrance. Altogether 20 booths will be set up to present various apprenticeship trades in San Diego.

Convair's booth will show pictorially the part apprentices play in the jet transport program while Astro's booth will center about the Atlas ICBM missile.

Mexican Trip Set by Divers This Week End

Delta Divers at Convair will spend this week end diving off the Baja California shores.

A car caravan will leave Oscar's Drive-In at the border Saturday morning (June 24) at 7 a.m. to travel down the coast to Punta Cabros. There Convair skindivers will camp out overnight and explore Mexican waters offshore.

Members are looking forward to the showing of the Oscar-winning movie, "The Sea Around Us," at their June 27 meeting in Balboa Park Conference Bldg., 7:30 p.m. Based on the best-seller authored by Rachel Carson, the documentary film of an underwater world is particularly interesting to all skindiving enthusiasts, said Harry Ruscigno, club spokesman.

Information on either the coming week-end trip or the Tuesday meeting can be obtained from Ruscigno by calling ext. 2348, Plant 1.

Club Honors Former Head With Plaque

Jesse B. Baker, CRA commissioner of the Convair Radio Club from its organization until a year ago, was singled out for special honors at the June 3 installation ceremonies held at King's Inn.

About 40 Convair hams and members of their families applauded as Baker received a plaque in appreciation of his services to the club during the years 1953-1960 as organizer, commissioner, and life member. Presentation on behalf of the entire group was made by L. E. Oldfield, charter member, now retired from Convair. Oldfield also was designer of the award.

Baker, a long-time radio ham, was instrumental in formation of the Radio Club in late 1953 and spearheaded all activities until he left the company last year. His wife accompanied him to San Diego to be present at the special event.

New officers seated at the dinner meeting were L. D. Rush, president, succeeding John Catterall, outgoing president; Don Bain, vice president; L. H. Stephenson, treasurer; and Dorothy Oldfield, secretary.



HAM INSTALLATION—At top, new officers of Convair Radio Club are installed in June 3 ceremony. At right, John Catterall, outgoing president, hands keys to clubhouse to incoming prexy, L. D. Rush. Others, from left, are James Lack, CRA commissioner; L. H. Stephenson, treasurer; Don Bain, vice president; Dorothy Oldfield, secretary. In lower shot Jesse Baker, former commissioner, receives plaque from L. E. Oldfield (right). Seated, next to Baker, is Mrs. Baker, at San Diego for ceremony.—Photos by Ed Warns.

Five Top Convair Pistol Teams Will Enter IRC Tourney Sunday

Five Convair Pistol Club teams will shoot it out for top honors at the ninth annual Industrial Recreation Council Pistol Shoot Sunday (June 25) at the San Diego Police Range. Firing starts at 9 a.m.

The five four-man squads will be out to take the tourney title which they lost for the first time last year. They will be in competition with teams from Astronautics, Ryan, Rohr, Solar, NAS, as well as last year's winner, San Diego Sheriff's Department.

No handicaps will be permitted in the matches which will consist of 30 shots over the .22 caliber police course, according to Commissioner Ash Bishop.

Results of the Convair club's June 11 shoot saw Carl Hornburg (Dept. 139) and Jim Halfacre (Dept. 180) play musical chairs in the police and short national events.

Halfacre won the latter event with a 256 score and Hornburg was second with 244. In the master class Hornburg's 13 "X"'s bettered Halfacre's four "X" efforts. Both shot identical 289 scores. Ralph Picard of GD/E ranked third with 281 points.

In the expert class Bill Dittmann (Dept. 6) and P. C. Dubendorf (Dept. 115) placed first and second with scores of 282 and 281. Top sharpshooter was Harvey Ingalls (Dept. 6), 257, followed by H. W. Holmerud (Dept. 3-1), 255. Leading marksmen were L. L. Richeson (Dept. 128), 252, and Dean Bowles (Dept. 6), 225.

Road Runners Hit Highways

Road Runners at Convair took to the highways for a couple of outings this month, one north up the coast, and the other east into the back country.

Last week end the trailer group moved into Pair-a-Dice Park at Guatay for a campout arranged by John Simas, wagon master, and his assistant, Jesse Parsons. Swimming, dancing, and a chili supper Saturday night provided the fun. Chefs were Mr. and Mrs. Lowell Ward.

Following the dinner around the campfire, Simas and his wife showed slides of their trip to Grand Canyon and Bill Hamilton showed vacation pictures taken in Colorado and the Northwest.

Earlier in the month, over the June 2-4 week end, 17 trailers and two campsters rolled into La Costa Beach. Sixty-three joined in the Saturday potluck dinner and bonfire that night on the beach.

Sportfishing Trips Discount Offered

Convair anglers are offered discount rates for half-day trips on sportfishing craft out of Seaforth Landing, 1641 Quivera Road, Mission Bay. Exchange tickets, good for a dollar deduction on regular price of $5.50 a trip, are available at Convair employee services, Bldg. 32, Plant 1.

Reservations are necessary. The discount offer expires at the end of July.

Ski Club Slates Officer Election

Convair Water Ski Club will elect officers following a 5:30 p.m. ski session off Santa Clara Point in Mission Bay tomorrow (June 22).

Members are encouraged to be present to cast their ballots, said Gene Sevigny, club commissioner. Skiing is continuing Saturdays and Sundays, between 9 a.m. and 1 p.m., off east shore of Tierra del Fuego.

CRA Calendar

(Convair Recreation Association has some 40 activities in operation. For information on Convair sports, call CRA headquarters, ext. 1245, Plant 1.)

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BADMINTON — Open play Tuesdays, 7:30 p.m., Federal Bldg., Balboa Park.

BOWLING — Summer swing leagues still forming. Call HO-9-8793.

BRIDGE CLUB — Sessions every Tuesday, 7:30 p.m., Barcelona Hotel, 326 Juniper St.

DELTA DIVERS—Week end trip June 24-25 to Baja California. Meeting June 27, 7:30 p.m., Conference Bldg., Balboa Park. Call Harry Ruscigno, ext. 2348, Plant 1, for information.

GOLF—CRA sweeps July 8-9 Bonita Country Club. Entries close June 30. Call ext. 1705, Plant 1, for registration.

GUN CLUB — Hunter safety course starts June 24 at Gillespie Field. Call Arnold Schrock, BR-7-4958, for information.

ICE SKATING — Skating sessions each Thursday at Iceland, 6055 Murray Blvd. Special Convair rates between 6:30 and 8 p.m.

JUDO—Workouts and instruction each Thursday evening, 7-8:30 p.m., CRA Clubhouse, Pacific Hwy.

MODEL RAILROAD — Meetings each Friday, 7:30 p.m., House of Charm, Balboa Park.

MOVIES—Reduced-price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB — IRC Pistol Shoot Sunday (June 25), San Diego Police Pistol Range, Federal Blvd. & Home Ave.

RADIO CLUB—Meeting tomorrow (June 22), 7 p.m., Harbor Drive headquarters.

SPORTS CAR CLUB—Meeting July 5, 7:30 p.m., Natural History Museum, Balboa Park.

SWIMMING — Convair family swim night Saturday (July 8), Mission Beach Plunge, 7-9 p.m. Free tickets at Convair employee services.

WATER SKI CLUB—Ski session and election of officers, Santa Clara Point, Mission Bay, tomorrow (June 22), 5:30 p.m.

July Swim Night Schedule Changed

Monthly swim night for Convair families has been set a week later than usual to avoid conflict with the Fourth of July holiday week end. Free swimming will be open to Convair people July 8 at Mission Beach Plunge, 7-9 p.m. Tickets may be picked up at employee services counter.



FAMILY TEAM—O. G. McQuire family, six strong, line up for bull's-eye shot with new bows they're breaking in after taking up archery as family sport. From left are McQuire (Dept. 98-8), Michael (Dept. 192), Greg, Colleen, Tim, Pat. Mrs. McQuire snapped picture on San Diego archery range.

Six Members of Convair Family Shoot as Team in Archery Club

A Convair family who likes to do things together is finding archery the perfect sport for the whole clan.

Largest family group to join Convair's Archery Club en masse and start learning bow twanging from scratch is that of O. G. McQuire, film editor in Convair's motion picture section. He and his five children, Michael, 19, also of Convair (Dept. 192); Greg, 15; Colleen, just 13; and the twins, Tim and Pat, 11, are all enthusiastic archery fans after joining a few weeks ago. And mother Patricia is thinking about making it a "full house."

"We like to take up sports we can do together," said McQuire. "And we decided upon archery as one of the least expensive and most fun for us all. Everyone can compete within his own ability."

Greg seems to be a natural. In his second shoot he won the boys' intermediate division in the recent Regional match. However, all the McQuires are learning fast, said Al Phipps, CRA commissioner, and are expected to be among the top archers in their various classes.

They practice two or three nights a week, said McQuire. "It keeps us all busy—better than constant television for the youngsters—and we're having a lot of fun as we are learning."

The McQuires not only turn out for every Convair event, but take part with the San Diego Field Archers for more experience in competitive matches. The whole family can be found digging in hard at every workday on the new Balboa Park field range, said Phipps.

"We have several family groups in the club, though none as large as the McQuire family, and they are all a great asset, no matter what age," said Phipps, whose own family, wife and two sons, are avid fans.

Ducats for 24 Padre Games Offered in Fourth Drawing

Lucky winners of the fourth baseball ticket drawing next week will have a chance to see one of 24 Padre games scheduled during the next few weeks, courtesy CRA.

Drawing will be held on Thursday (June 29) with boxes for entries now at employee services counter, Bldg. 32, Plant 1; at Rose Canyon, in office of Virginia Cannon, ext. 2125; at the ramp, in office of Leonard Smith, Bldg. 37.

Each entry, only one per person, must contain name, clock number, shift, department number, location, plant extension.

Padres will play Salt Lake City July 12, 13, 14, 15, 16, 17; Tacoma during week of July 18 through 23; and Vancouver from July 25 through 30. The first week in August the San Diego ball club will meet Spokane at Westgate Park.

Final drawing of the season will be in August for Padre tilts vs. Honolulu.

Three Trout Bite For Club Contest

Maybe not all the fish were bitin' last month, but rainbow trout were certainly doing their share to keep Convair anglers happy.

Each of the top three prizes in the CRA Fishing Club's May contest went to catches of rainbow trout. And each trout was caught in Lake Murray.

George Clarke (retired) won $15 with a 16-in. trout; Ruth Menzie (wife of Commissioner Bob Menzie) claimed $10 with a 15½-in. specimen; Anthony Pommier (Dept. 188) took $5 with a 14¼-in. fish.

In addition to the contest winners, two giant rainbow trout, weighing eight and 10 lbs., were caught by Larry Thrall (husband of Evelyn Thrall, Dept. 3).

Thrall caught the whoppers in Lake Mojave, below Hoover Dam, which disqualified them for entry in the contest because they were not caught in California waters.

Tickets Tomorrow For Two Musicals

Tickets will go on sale tomorrow morning (June 22) at 9 a.m. at Convair employee services to two musical productions coming to San Diego theaters next month.

Convair night to "Destry Rides Again," first Star-Light Opera presentation this season, will be July 9. A 30 per cent reduction in price will be given Convair people through CRA arrangements with $3.50 seats on sale for $2.45.

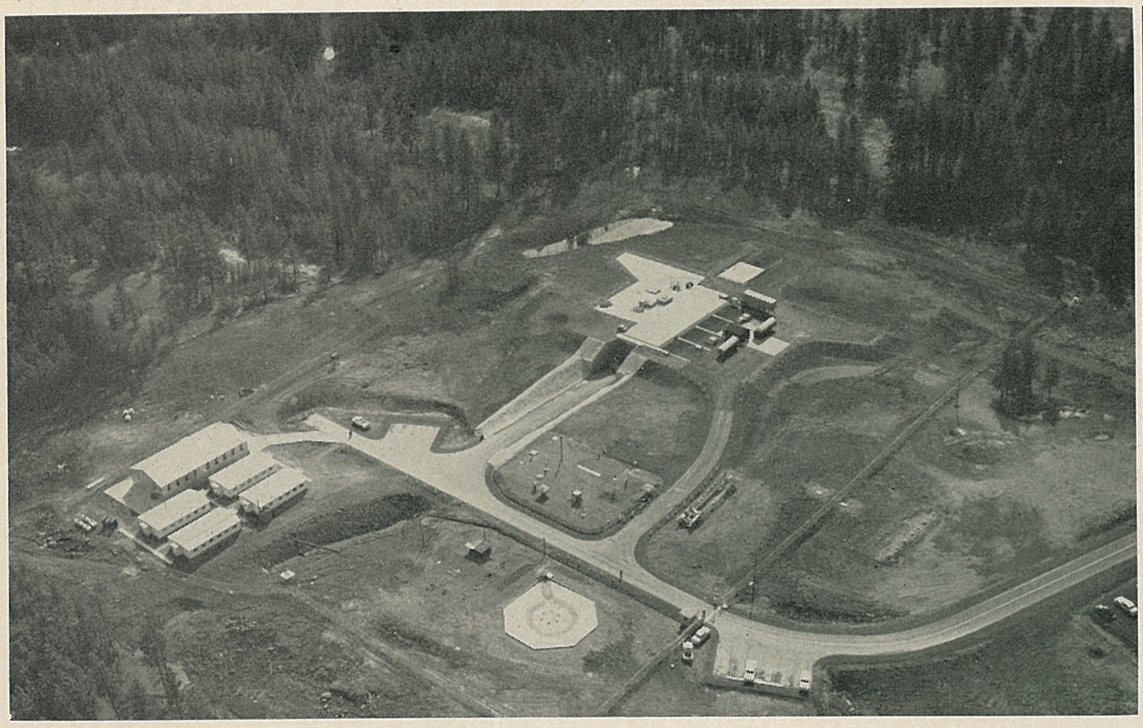
Tickets will also be on hand to the third showing in the new Circle Arts Theatre, "Silk Stockings." Convair night is slated for July 2. Reduced prices are $2.75, $2.20, $1.80, and $1.40.

Bonita Sweeps Next For Convair Golfers

Convair golfers will get an opportunity to play the new Bonita Valley Country Club course at the next CRA sweeps July 8 and 9.

The Bonita event replaces the July sweeps formerly scheduled at Flying Hills, said Ken Wulfemeyer, golf commissioner.

Entries open today and close June 30 at ext. 1705, Plant 1. Green fees will be $3.50.



LAUNCH SITE—Exceptionally good aerial by Astro's Ron Boothe shows Fairchild AFB "semi-hard" Atlas launch site under construction. Launcher and missile are hidden under roof at center. Launch control center is underground near "U" in roadways. Note security fence and relative size of people along roadway as well as missile handling trailer parked nearby.

First 880-M Will Fly to Formosa To Introduce 'Mandarin Jet' Service

First delivery of a General Dynamics/Convair 880-M is scheduled before the end of the month.

Ferry flight of the "Mandarin Jet" to Taipei, Taiwan (Formosa), home of Civil Air Transport, will also mark delivery of the first Convair jet transport (including the basic 880) to a foreign carrier.

The plane was formally accepted by CAT, flag carrier of the Republic of China, on June 6. Among those present for acceptance ceremonies the previous day was Dr. George K. C. Yeh, Republic of China ambassador to the United States.

Since acceptance, the plane has been used by the airline for pilot training.

The ferry flight of the CAT jet transport will span almost 7,000 nautical miles. The jet will depart from Los Angeles with stops scheduled at Honolulu and Wake Island en route to its home base.

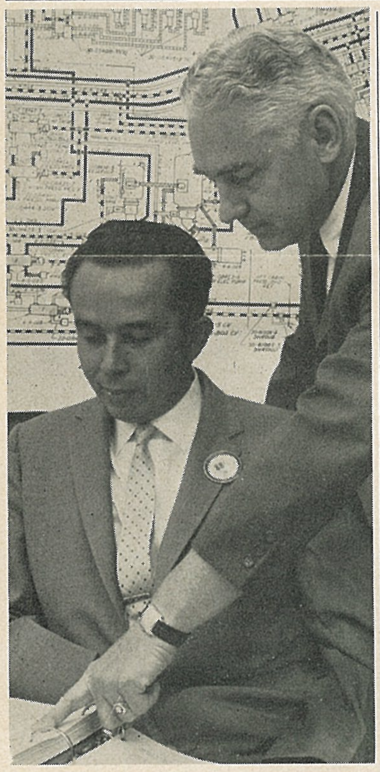
A CAT crew will fly the plane on the ferry flight, accompanied by two GD/Convair production flight men, U. S. Johnson, pilot, and C. L. Falkenthal, flight engineer. Other CAT personnel, who have been training at GD/Convair the past several weeks, will also be on board.

Johnson and Falkenthal will remain at the CAT home base for several weeks to assist the airline as required.

Other production and customer acceptance flights are under way preliminary to delivery of 880-M jetliners to Viasa of Venezuela, Japan Air Lines, Alaska Airlines, and Federal Aviation Agency during the summer months.

Three aircraft have been utilized in the eight-month 880-M flight test program to prove out design changes from the basic 880. Provisional 880-M certification by the Federal Aviation Agency has already been issued and certification for commercial airline use is planned for late July.

The 880-M embodies several changes from the basic 880 which enable it to operate from even shorter runways. At the same time increased fuel capacity gives it greater range and engines with increased thrust insure high performance at even heavier operating weights.



CONFERENCE—Capt. Manuel Mendoza of Viasa, Venezuelan airline, and P. H. Selby, GD/Convair production flight training supervisor, consult during training program.

880 Jetliners Crisscross U.S.

Convair jetliners are coming of age as they go into a second year of passenger service with 31 jet birds ticking off 133,000 miles each day as 880s crisscross the country over networks of three domestic airlines.

Five major cities now are served by 880s of two or more lines—TWA and Delta Air Lines Convair jets fly into Los Angeles, Chicago, St. Louis; TWA and Northeast Airlines into Boston; and all three into New York.

Altogether, TWA 880s serve 14 cities with the 15th, Pittsburgh, going on the list today. Delta sends 880s into 10 cities; Northeast, into eight. Convair 880s are now making 125 departures each day on scheduled passenger runs.

Average daily utilization of 880s during last month was 5 hrs., 58 min. with Delta; 7 hrs., 55 min., Northeast; and 6 hrs., 49 min., TWA. First Delta and TWA 880s have just been put through first complete overhauls, signifying 2,500 hours each in the air. Other Delta 880s are ready for first step of major overhaul.

Space Age Researchers Operate New Facility

General Dynamics/Fort Worth's new "space age" research facility, in which models of aircraft, missiles and other space vehicles can be tested at simulated speeds as high as Mach 15, and temperatures as high as 15,000 degrees Fahrenheit, is nearing completion.

Engineers hope to have the Hyperthermal Research Facility (HRF), operating soon. R. A. "Bob" Stevens, Dept. 6, is project engineer. Design and construction has been under way since February, 1960. The facility is adjacent to the high altitude test chamber of engineering's test lab.

HRF testing will play a vital role in the design of future Convair vehicles that could include orbital bombers, manned and unmanned recoverable space systems and boost-glide vehicles.

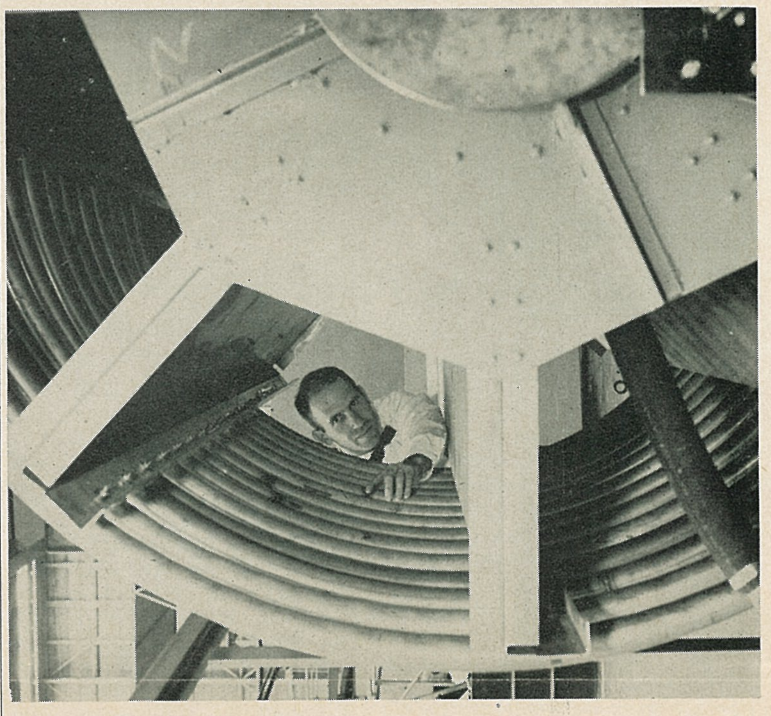
Planned and designed entirely by Convair FW engineers, the HRF center is expected to have testing capabilities unmatched in the nation.

An electric arc generator will heat an air stream to as high as 15,000 degrees, requiring 1,800 kilowatts of electric power. The test air stream will be approximately eight inches in diameter. The facility will be capable of pressure levels up to 500 pounds per square inch.

The test chamber itself is a 4½-foot cubicle, built with 1½-inch steel plate and windows 20 inches in diameter, made of inch-thick plate glass.

HRF is a phase of GD/FW's research program directed by Dr. Lee Secrest. It was developed and will be operated under aerospace technology, directed by E. B. Maske.

Project coordinator is R. N. Oliver, chief of aerothermodynamics.



SPECIAL DESIGN—GD/FW's hyperthermal research facility includes specially-designed electrical system, portion of it brain-child of John S. Turner Jr., senior test engineer. It includes cylindrical stainless steel, which he's inspecting.

Both Pod Components Dropped Successfully

Successful drop of both upper and lower components of the B-58 two-component pod on a single flight highlighted pod-drop activity in June.

Hustler No. 38 jettisoned the lower-component tank on its initial run over White Sands Missile Range, New Mexico, then made a high-altitude "bomb" drop on the second pass over the range. The drop was made using the Hustler's bomb-nav system.

Fuel was not carried in the lower tank on this sortie, although it would be carried on a regular combat mission.

Fred Voorhees piloted No. 38, with Fred Hewes in second station and Ken Timpson in third.

An upper-pod drop for No. 38 was slated for last week end, using a simulated warhead.

"Modified success" was reported on another low-level drop by Hustler No. 4 over Tonopah Test Range, Nevada, demonstrating the pod-retardation system.

Crew consisted of Earl Guthrie, pilot; G. C. Tate, second station; and O. D. Lively, third station.

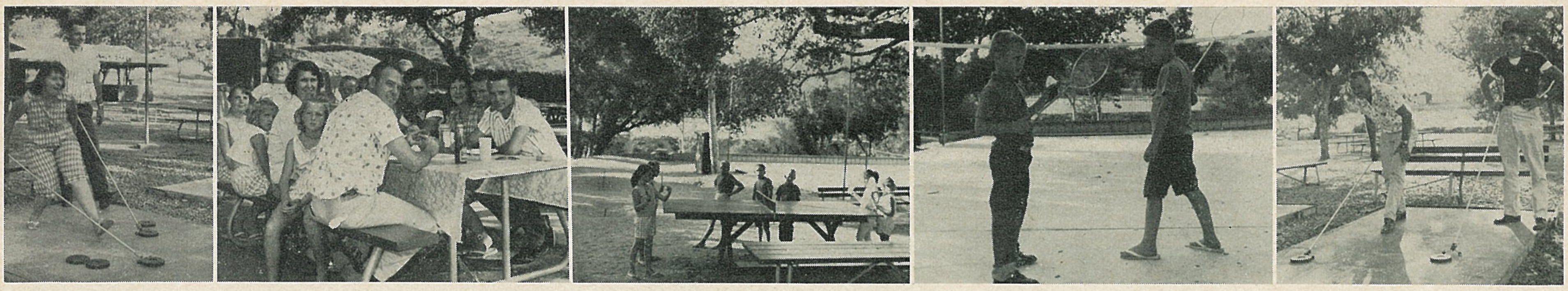
Nearly 40 GD/FW people are stationed at Kirtland AFB in support of the drop efforts of No. 4. R. P. Andrews is airplane captain, Jim Graham pod captain.



VIASA CREWS—Flight crews at GD/Convair for training line up beside Viasa 880-M due to go to Venezuelan airline within next few weeks. From top left are Elias Paez, Fernando Selgas, Miguel Abasolo, Jose De Pascualli, Oswaldo Barrios, Manuel Mendoza, Jose Azpurua, Domingo Urdaneta, Calixto Bolivar, Roy Nauta, Napoleon Pelucarte, Jorge Esteves, Pierre Morchain, Marcos Carbonell, Carlos Hiller, and Convair instructors Tom Johnson, C. L. Falkenthal, P. H. Selby, production flight supervisor, Roger Chaney, L. W. Hughes, training coordinator.



ACCEPTED—GD/Convair jet transport program passed milestone earlier this month when Civil Air Transport accepted first Convair 880-M. Ceremonies included presentation of desk set to Dr. George K. C. Yeh, Republic of China ambassador to U.S., by C. Rhoades MacBride, executive vice president of General Dynamics. From left are CAT executives, G. A. Doole Jr., managing director; D. B. Gluskin, special assistant to president; Ambassador Yeh; MacBride; R. C. Loomis, president of GD/Convair.



FAMILY FUN—Summertime is picnic time and CRA's Pecan Park is perfect place. In photos family and guests of J. E. Sanders (Dept. 148) are shown enjoying few of many facilities available in park. CRA especially encourages Convair families to utilize park after work during cool of evening, and for breakfast outings Saturday and Sunday. Located on Hwy. 80 near Johnstown, park is open every day except Monday until 9:30 p.m.—Photos by Frank Linn, Dept. 400-1.

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Vol. 14, No. 14 Wednesday, July 5, 1961

SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.



TOP THREE—Leading money savers at GD/Convair during first six months of year are (from left) D. R. Wilson (Dept. 129), L. F. Cescolini and W. J. Gibson (both Dept. 140). Gibson and Cescolini, with Cost Improvement Proposal savings of more than $25,000 each, are eligible for 1961 President's Award.

Gibson and Cescolini Qualify For 1961 President's Award

Two General Dynamics/Convair men have qualified for the 1961 President's Award and 23 other flat-salaried men have chalked up CIP savings of more than $5,000 each during the first six months of the year.

In running for the President's Award, highest GD/Convair cost reduction honor, are W. J. Gibson (Dept. 140) and L. F. Cescolini (Dept. 140). Both have fulfilled the requisite of saving more than $25,000 to qualify for the award.

Gibson is credited with saving the grand total of $115,722 with one Cost Improvement Proposal. His recommendation involved an ingenious method of avoiding replacement of assemblies involved in the redesign of 990 jet outboard pylons.

Cescolini, assistant foreman in Dept. 140, is eligible for the President's Award with savings of $30,084.

Before his CIP was installed, some 480 details were located, drilled and riveted in major pod drill door fixtures which slowed flow of work through the fixtures. Now sub-assembly tools have been made for pod door details and work flows uninterrupted through major drill fixtures.

Aside from these two outstanding cost savers during the first six months of this year, 23 others (Continued on Page 2)

1,800 Attend Club Meeting

More than 1,800 members and guests of General Dynamics/Convair Management Club attended the June 24 meeting at Russ Auditorium.

Special club guests at the meeting were 40 representatives of the following airlines: American Airlines, Viasa, Trans World Airlines, Japan Air Lines, Civil Air Transport, Real, Swissair, and Delta.

Ed Caldwell, general supervisor-inspection, received the Man of the Year Award, the club's highest honor. MacSave-it awards for cost reduction went to R. G. Bond (in Dept. 97-2 when CIP was submitted) and L. F. Cescolini (Dept. 140).

CIP and ES Savings Hit $621,354 Through First Six Months of '61

More than a half million dollars has been saved at General Dynamics/Convair during the first six months of 1961 through the Employee Suggestion and Cost Improvement Proposal programs.

"Though this is a considerable sum, cost reduction progress is lagging behind goals established for the division and more and better cost-cutting ideas are urgently needed," said C. H. Hahn, assistant supervisor of cost reduction section.

Exact sum of savings through June 16 of this year is $621,354. Direct departments have contributed $451,170 to this total; indirect departments have accounted for $170,184.

Three direct departments, 140, 129 and 119, have exceeded their year-end goals. Six others, 146, 135, 137, 143, 117 and 102 are keeping pace percentagewise with their total targets.

Two of some 30 indirect departments are "in the black" through June 16; all others are short of the mark.

Bldg. Planned For Customer Flight Crews

A building designed especially for customer airline flight crews visiting the General Dynamics/Convair plant will be erected south of the salvage yard with construction to start in the next few weeks.

The 25 x 40-ft. concrete block structure will be built adjacent to Bldg. 49 with access from the Lindbergh Field side, said H. A. Smith, chief plant engineer at GD/Convair.

It will contain a pilots' lounge, office, conference room in one section and shower, locker room and rest room in the other half. Completion is slated for the first part of September.

* * *

Other projects now in progress at Plant 1 will see the repainting of the hospital building (Bldg. 15) in GD/Convair colors. Robert McMullan and Son, Inc., San Diego painting firm, has already begun sandblasting (on Sundays) to prepare for the paint job.

Preparations are under way for installation of a climate control system in the southeast corner of Bldg. 4 mezzanine occupied by service parts personnel.

The 15,000-sq.-ft. area will be enclosed with a partition across the north end from Col. 1 to 7. Work should be completed some time next month.

A freight elevator will be installed in the GD/Convair cafeteria building adjacent to Bldg. 19 this fall, said Smith.

Biron and Williams Senior VPs; VP Titles to Hillman, Meador

Edward J. Williams, formerly vice president-manufacturing, has been promoted to General Dynamics senior vice president-manufacturing; and Robert H. Biron, former vice president-industrial relations, has been promoted to senior vice president-industrial relations.



E. J. Williams

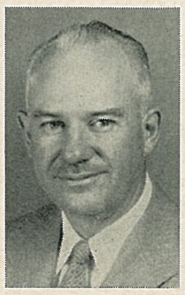
At the same time, S. E. G. Hillman, former director of materiel, was promoted to vice president-materiel; and Chester L. Meador, former director of contracts, to vice president-contracts; Patrick J. Sullivan, former vice president-public relations, to vice president-communication; and Douglas A. Larsen, former public relations director for GD at Washington, D. C., to assistant vice president-communication.

Earl D. Johnson, president of General Dynamics, made the announcements.

At Johnson's request, R. C. Sebold, formerly vice president-engineering, Convair, will assume a special full-time consultant sta- (Continued on Page 2)

Robert Watts Named GD Vp

Robert B. Watts last month was promoted by election of the Board of Directors to the office of corporate vice president and associate counsel of General Dynamics Corporation.



Robert Watts

Since April 30, 1954, Watts has been vice president and general counsel of the former Convair Division of Dynamics and a member (Continued on Page 2)



ACCEPTED — Viasa of Venezuela accepted its first of two GD/Convair 880-M jet transports at ceremonies on June 26. From left are Capt. Marcos Carbonell, chief pilot of Viasa; R. C. Loomis, GD/Convair president; Dr. Luis E. Navarro Martinez, Venezuelan consul; Capt. Manuel Mendoza, chief of operations for Viasa; and Juan Anthony of Venezuelan consulate. Airline captains received gold keys and Dr. Martinez was given desk set to commemorate acceptance.

First 880-M Jet Flies to Far East

First two General Dynamics/Convair 880-M jet airliners accepted by customers soon will be flying scheduled routes in the Far East and South America.

Viasa of Venezuela accepted its first 880-M June 26. After four weeks of flight training at GD/Convair in San Diego, Viasa will fly the new jet to Caracas preparatory to start of commercial service between Caracas and New York, Miami, New Orleans, Bogota and Lima.

Civil Air Transport flew its 880-M to Taipei, Taiwan, June 30 by way of Los Angeles, Honolulu and Wake. Previous to departure, the plane had been making three flights a day at San Diego during a training program for seven CAT captains and five flight engineers.

A third 880-M customer, Japan Air Lines, is scheduled to accept its first transport this week.

At the Viasa acceptance ceremony, R. C. Loomis, GD/Convair president, presented commemorative keys to Capt. Manuel Mendoza, chief of operations, and Capt. Marcos Carbonell, chief pilot of Venezolana Internacional de Aviacion S.A.

Representing the Venezuelan government at the ceremony was Dr. Luis E. Navarro Martinez, Venezuelan consul general at Los Angeles.

ENGINEERS GIVE 98 PINTS BLOOD

Engineers of General Dynamics/Electronics and General Dynamics/Convair together with GD/Convair experimental turned out to contribute 98 pints of blood at the June 22 bloodmobile visit.

Colds and recent polio shots disqualified a large number of the 175 originally signed up, said Ken Wulfemeyer of employee services. He said that the amount of blood collected will put the plant's blood credit back in business for the present, at least. It had almost reached the zero mark before the June collection.

Next bloodmobile will come to the plant some time in August.

Blood registered in GD/Convair's name with the San Diego Blood Bank is also available to General Dynamics/Electronics people, located at the San Diego plant, and members of their immediate families.

Log Book Entries

Service Emblems

CONVAIR

Service emblems due during period July 1 through July 15.

Twenty-year: Dept. 3-5, C. S. Taylor; Dept. 6, H. C. Matteson, Allen Van Norman, F. G. Williams; Dept. 25, J. O. Blake, R. F. Missman; Dept. 31, P. D. Burtchell, R. L. Cook, M. A. Cope, N. E. Eldridge; Dept. 44-7, R. G. Damschroeder; Dept. 69-1, J. H. Struthers; Dept. 139, J. H. Hatchett; Dept. 140, R. B. Walling Jr.; Dept. 145, S. S. Smyczynski Jr., J. J. Zyirek; Dept. 148, E. T. Gilbert; Dept. 171, G. W. Privett; Dept. 400, J. C. Calhoun, E. A. G. Ganoe; Dept. 401, M. J. Becker, C. F. Heberer, G. F. Nebelung.

Fifteen-year: Dept. 6, E. D. Berlin, C. F. Schrick; Dept. 15, H. L. Addis; Dept. 25, L. G. Lamp; Dept. 97, Sybil C. Dormier; Dept. 101, K. K. Jones; Dept. 110, C. D. Johnson; Dept. 115, William Sileneck; Dept. 143, Erma R. Taylor; Dept. 171, F. S. Pyatt; Dept. 188, J. W. Fuhrman; Dept. 401, Alva O. Lampman.

Ten-year: Dept. 1-18, R. M. MacIver; Dept. 1-31, Ruth Z. Potts; Dept. 6, D. K. Hall, J. D. Hash Jr., J. G. Martes, H. A. Mitchell Jr., G. F. Mothersole, R. W. Mullis, R. C. Peller, L. C. Ward; Dept. 14, Lois L. Napier; Dept. 21, Jack Bohannon; Dept. 25, R. S. Kennedy; Dept. 31, T. C. Eastin, W. F. Leverenz; Dept. 44, Delores D. Luker; Dept. 63, J. R. Freelin; Dept. 69, G. F. Deering.

Dept. 91, Betty V. Hough; Dept. 95, C. E. La Sota; Dept. 97, Sidney Weiner; Dept. 100, Florence K. Murkerson; Dept. 101, A. L. Carr, Martha Moreno, J. D. Rooks; Dept. 110, Mary S. Funaro; Dept. 129, Olympia A. Paul; Dept. 135, H. S. Roberts; Dept. 138, G. H. Ellis; Dept. 140, Mary B. George; Dept. 142, E. E. Burris; Dept. 145, A. A. Leonel; Dept. 146, F. H. Peariso; Dept. 160, D. E. Henry; Dept. 171, G. A. Leith, W. C. Smith; Dept. 188, Edith A. Bingham; Dept. 192, Phillip Holden; Dept. 197, Charlotte Hansen; Dept. 215, Mae H. Jarman; Dept. 216, Mary P. Ehmler; Dept. 218, R. A. Frandon; Dept. 223, L E. Roberts; Dept. 400, C. J. Costantino, Phyllis O. Joslin, P. E. Lehman, C. N. Melton, C. H. Staup; Dept. 401, D. C. Baillif, G. A. Gill, J. F. McIntyre, C. E. Wright.

GD/ELECTRONICS

Fifteen-year: Dept. 6, Thelma E. Stephens.

Ten-year: Dept. 5, Mitsuo Ishihara; Dept. 6, P. B. Miles.

Promotions

CONVAIR

Promotions to or within supervision effective June 19:

Dept. 6-0 Engineering: To product support group engineer, R. B. Bergan.

Dept. 8-4, Systems & Procedures: To factory methods asst. supervisor, C. H. Hahn.

Dept. 25-5, Plant Engineering: To facilities requirement asst. supervisor, J. H. Maloney.

Dept. 133, Jet Transport Door Assembly: To asst. foreman, J. R. Bailey.

Dept. 140, Pot & Pylon Assembly: To asst. foreman, L. A. Peister, R. E. Pendarvis.

Dept. 141-1, Jet Transport Delivery Preparation: To asst. foreman, A. L. Bishop Jr., A. I. Cox, B. G. Farrar, A. L. Fuller, L. D. Skelton, J. T. Smith.

Dept. 180, Proofing Mockup: To foreman, J. D. Roper.

Dept. 216, Electric Bench & Fabric: To asst. foreman, M. W. Walker.

ADVANCED PRODUCTS

Dept. 986-3: To foreman, R. L. Russell.

PALMDALE

Dept. 329, Accounting: To chief of cost control-Palmdale, P. A. Scott.

Personals

CONVAIR

My sincere thanks to my many friends at GD/Convair who remembered me with cards, flowers, kind wishes, and gifts during my recent illness.

W. H. "Bill" Story, Dept. 192.

* * *

We are most grateful to Convair friends for the beautiful flowers, cards, and messages of sympathy received when we lost our son, William Nugent.

Mr. and Mrs. Edward J. Benchley, Dept. 45.

Births

CONVAIR

DeANDA—Daughter, Bertha, 6 lbs., 6 oz., born June 18 to Mr. and Mrs. C. M. DeAnda, Dept. 101.

ELLICKSON — Daughter, Kimberly Ann, 6 lbs., born May 31 to Mr. and Mrs. G. A. Ellickson, Dept. 137.

FLORES—Son, Ronald David, 7 lbs., 12 oz., born June 13 to Mr. and Mrs. J. B. Flores, Dept. 31.

GAUT—Son, Timothy, 6 lbs., 7 oz., born June 16 to Mr. and Mrs. Don Gaut, Dept. 192-4.

HOWELL—Daughter, Trina, 8 lbs., born June 14 to Mr. and Mrs. Donald Howell, Dept. 140.

MARTINEZ—Son, Abel Paul, 7 lbs., 13 oz., born May 28 to Mr. and Mrs. Manuel M. Martinez, Dept. 201.

MATTHEWS—Son, Michael, 10 lbs., born June 15 to Mr. and Mrs. Michael Matthews, Dept. 148.

SELNA—Twins: Mary Kelly, 5 lbs., 10 oz., Mark Joseph, 5 lbs., 13 oz., born June 26 to Mr. and Mrs. Ted Selna, Dept. 6.

SWINDOLL—Son, Mark Alan, 7 lbs., 13 oz., born June 19 to Mr. and Mrs. Bob Swindoll, Dept. 142.

WILLIAMS—Son, Theodore, 6 lbs., born June 24 to Mr. and Mrs. Don Williams, Dept. 192-1.

Deaths

CONVAIR

DIAZ—John, Dept. 400-4. Killed in auto accident June 25. Survived by three sisters, three brothers.

EWING—Pansy Viola, Dept. 92. Died June 28. Survivors include mother and sister.

FLOYD—Thomas B., Dept. 400-4. Died June 15. Survived by wife, Helen, son, daughter and sister.

HANSEN—Laurenz Dale, Dept. 15-6. Died June 24. Survived by wife, five children.

MOSER—Gene L., Dept. 142. Died June 18. Survived by wife, Gwen, three sons, sister.

PLAUSSE—Joseph E., Dept. 25-9. Died June 25. Survived by wife, Winifred, mother, brother.

RICHARDSON — John T. Jr., Dept. 188-6. Died June 26. Survived by relatives in Mansfield, La.

Retirements

CONVAIR

BERGEN—John N., Dept. 110. Seniority date June 12, 1940, retirement effective June 16, 1961.

EBY—Marguerite H., Dept. 97-7. Seniority date April 17, 1951, retirement effective June 23, 1961.

PHILLIPS—Herbert L., Dept. 138. Seniority date Oct. 16, 1941, retirement effective June 16, 1961.

WATT—Robert S., Dept. 401-0. Seniority date May 11, 1936, retirement effective June 19, 1961.

PALMDALE

WALTER—Clyde E., Dept. 325-1. Seniority date Jan. 14, 1957, retirement effective June 16, 1961.

Gibson, Cescolini Qualify For Award

(Continued from Page 1)

have notched CIP savings of more than $5,000 each. Several individuals need only a relatively small amount in recommended savings during the next six months to qualify them for the President's Award.

Among this group the biggest savers are D. R. Wilson (Dept. 129) with $22,933; M. F. Link (Dept. 119), $18,206; P. F. Veal (Dept. 3-8), $16,005; C. E. Rice (Dept. 137), $14,268; R. G. Bond (in Dept. 97-2 when CIP was submitted, now in GD/Electronics Dept. 2), $15,613; G. H. Parker (Dept. 119), $12,915; S. C. Cushman (Dept. 146), $12,804; E. E. Carpenter (Dept. 129), $11,691; G. K. Phares (Dept. 31), $10,131.

Others are R. B. Mohr (Dept. 249), $8,817; N. R. Keough (Dept. 31), $8,911; J. A. Johnson (Dept. 6), $8,587; E. L. Williams (Dept. 100), $7,820; W. C. Braley (Dept. 6-21), $7,534; T. E. Johnson (Dept. 190-1), $7,534; V. P. Mavrinac (Dept. 401), $7,196; A. V. Elo (Dept. 31), $6,859; W. R. Holmes (Dept. 6-23), $6,296; J. Arena (Dept. 140), $6,194; F. N. Minter (Dept. 90), $6,120; F. J. Serio (Dept. 135), $6,091; R. R. Bullock (Dept. 95), $5,604; M. Prince (Dept. 140), $5,297.

To achieve their savings totals Phares, Carpenter and Serio have had no less than five CIPs each installed during the first six months of 1961. Other multiple submitters are Keough (three) and Link, Mohr, Arena, and Elo, each of whom had two approved.

SOCIAL SECURITY MEETINGS RECESS

Weekly Social Security meetings for General Dynamics/Convair people nearing retirement will be recessed after July 17 for the rest of the summer. They will resume in October.

Two more sessions will be held Monday evenings, July 10 and 17, in the CRA Clubhouse on Pacific Highway across from Gate 2, Plant 1, said Keith Sears of employee services who is handling the retirement planning program.

Anyone wishing information on various aspects of the Social Security law may contact Sears at ext. 1705, Plant 1.

★ Convairiety ★

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Approximate current total circulation, over 70,000. News items and letters to the editor are solicited, but no advertising can be accepted.

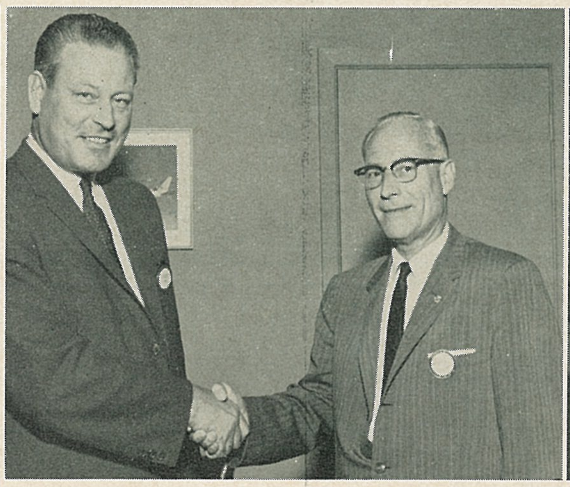
SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Fred Bettinger, news editor; Grayce Fath, Helen Pemberton.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, GD/Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.





MANY YEARS—A. W. Abels, export sales manager, and T. M. Hemphill, technical information coordinator, are latest to receive 30-yr. service emblems. In left photo, C. Rhoades MacBride, General Dynamics executive vice president, congratulates Abels. At right, Hemphill is pinned by R. C. Loomis, GD/Convair president.



25 YEARS—Grayce Fath, longtime Convairiety staff member, received 25-year pin recently from R. H. Biron, GD senior vice president-industrial relations. Present were Dick Wilkens Jr., GD/Convair industrial relations manager, and Logan Jenkins of Convairiety.

First Production Flight Team Goes Overseas With CAT 880-M

First production flight team to go overseas with Convair jet transports left General Dynamics/Convair last weekend with the Civil Air Transport 880-M.

Off to Taipei, Formosa, are U. S. Johnson, pilot, and C. L. Falkenthal, senior flight engineer. They are the vanguard of more than a dozen GD/Convair flight crewmen who will be accompanying 880-Ms to foreign countries in the next couple of months.

Johnson and Falkenthal will be at CAT headquarters 30 days to assist with transition training and putting the aircraft into operation over the airline's Far East network. When they return to San Diego they will prepare for their next trip out with the 880-M going to Federal Aviation Agency at the Oklahoma City base.

Next to go abroad will be Loren Pilling, pilot; Ludy Knudsen and Tom Johnson, flight engineers, who will accompany the first Viasa plane to Caracas, Venezuela, the end of this month. Knudsen will return in a couple of weeks in time to wing off to Europe on his assignment with Swissair-SAS.

Roy Adkins, as pilot, and J. B. Van Houten, as flight engineer, are slated to go with the Alaska Airlines 880-M by the first of August. Some time next month, L. C. Brandvig, pilot, and L. A. Scrivener, flight engineer, will go to Tokyo with the second Japan Air Lines craft. Brandvig will remain there the rest of this year with a second GD/Convair pilot to join him this fall.

Assigned to Swissair-SAS are A. P. Wilson, pilot, and Knudsen. After accompanying the 880-M to Zurich, later next month, they will go on to Stockholm to assist with crew training at SAS headquarters. Knudsen, who spent a couple of months there the first of this year, will be at the Swedish base until the end of the year.

Con-Trib-Club Donates $7,990

Charitable organizations in San Diego and Antelope Valley areas were voted a total of $7,990 by the General Dynamics/Convair Employees' Con-Trib-Club committee last month.

The committee approved $2,000 for camperships for San Diego children who, otherwise, would not have camping experience. YMCA and Salvation Army in San Diego each received $1,000 for their summer camp programs.

Recommendations of the Antelope Valley Employees' Advisory Committee for donations to seven Los Angeles County organizations were accepted.

They are: Los Angeles County, Bureau of Public Assistance, Department of Charities, $300 for Antelope Valley Good Neighbor Fund; North Antelope Valley Community Chest, $1,500; South Antelope Valley Community Chest, $1,000; Foundation for the Junior Blind for camperships, $300; Salvation Army, Palmdale, $500 for camperships; City of Hope, $750 for capital equipment; Los Angeles County Association for Mental Health, $500; Children's Hospital Society of Los Angeles, $1,140, $400 for endowment of a crib for five years and $740 for capital equipment.

Counseling For Law Students Scheduled

Any General Dynamics/Convair person interested in studying law may get expert counseling within the plant tomorrow (July 6) afternoon.

A counselor from University of San Diego School of Law will be at Plant 1 for the afternoon only to advise men and women planning to work toward law degrees on a full or part-time basis.

Appointments must be made before noon on Thursday with Mark Saunders of GD/Convair educational services at ext. 1548.

Requirements for admission to the School of Law include a bachelor's degree from an approved college or university and a satisfactory score on the school's admission test. No student dismissed from another law school is eligible.

Operations Planning Manager Appointed

Appointment of R. M. Hatcher as manager of operations planning was announced last week by J. H. Famme, GD/Convair vice president-operations.

Reporting to Hatcher will be H. A. Smith, chief plant engineer; R. E. Bechtol, chief of facility planning, and W. E. Wise, chief of applied manufacturing research.

Also effective last week, R. D. Marks, chief of manufacturing planning and methods, and J. B. Henn, chief of operating controls, report to F. H. McLaughlin, GD/Convair factory manager.

Biron, Williams Now Senior VPs

(Continued from Page 1)

tus with the corporation.

His new duties will be under the direction of C. Rhoades MacBride, executive vice president, General Dynamics.

"Mr. Sebold has generously agreed to continue in this capacity so that the corporation can take maximum advantage of his long and broad experience with the many engineering activities of the corporation," Johnson said.

(For biographical data on Biron, Meador and Hillman, see **Convairiety, June 7, 1961.**)

Williams is a native of Wheeling, West Va., and attended Oklahoma University and the University of West Virginia, where he obtained his Bachelor of Science in electrical engineering in 1933. He did graduate work at Carnegie Institute of Technology in 1934. Williams was a management consultant for Norris and Elliott, Inc., Columbus, Ohio, until 1940 when he joined American Chain and Cable Co., New York, ultimately as vice president-operations. He rejoined Norris and Elliott in 1959 and was appointed vice president-manufacturing for General Dynamics Feb. 1, 1961. He has been on duty at San Diego for several months.



Douglas Larsen

Larsen graduated from the University of Michigan in 1940 and was on the editorial staffs of the Houston Chronicle and the Washington Daily News before joining Newspaper Enterprise Association in Washington, D. C., in 1942 as a columnist. He left NEA to join General Dynamics in 1958 in charge of the Washington public relations functions.

Robert Watts Vp, Associate Counsel

(Continued from Page 1)

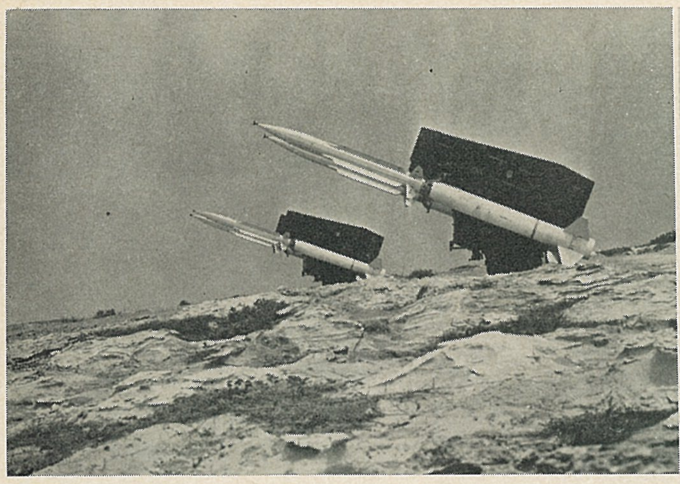
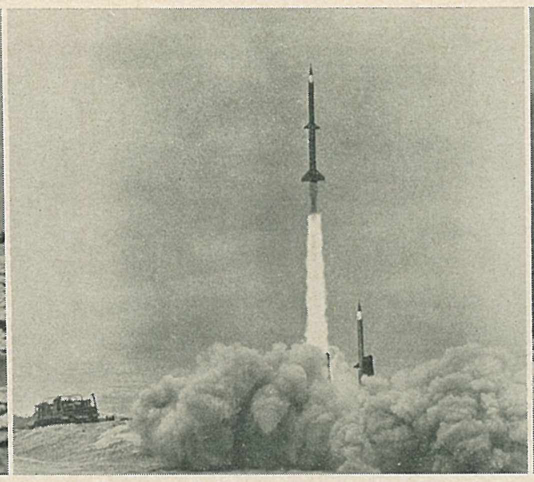
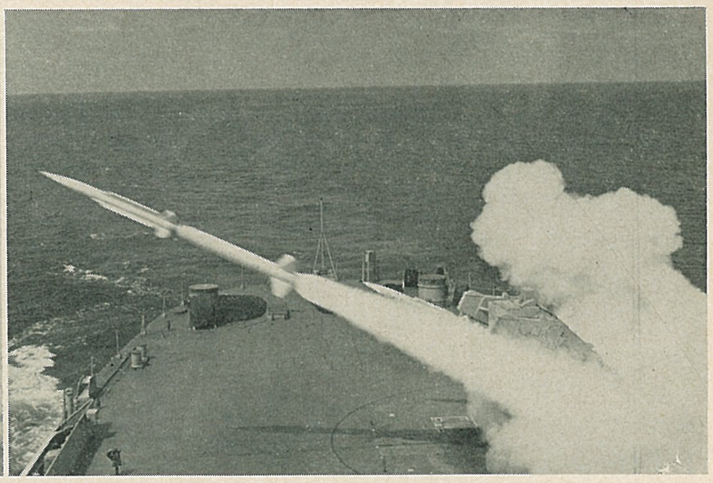
of the corporation Board of Management. A Yale Law School graduate, he spent eight years as associate and then general counsel for the National Labor Relations Board in Washington, D. C.

A trial and appellate specialist, Watts has argued before every Federal appellate court and the Supreme Court of the United States, where he handled 14 cases.

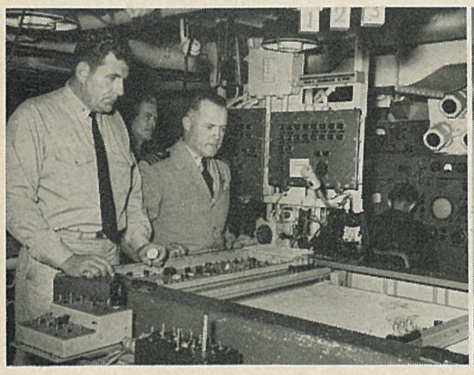
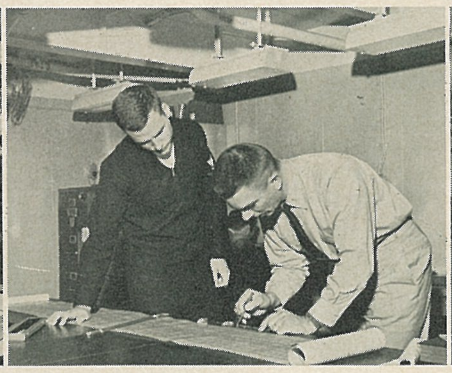
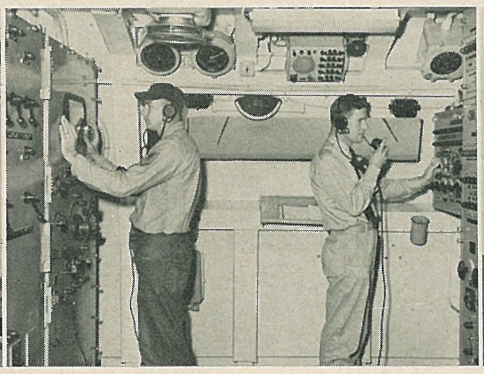
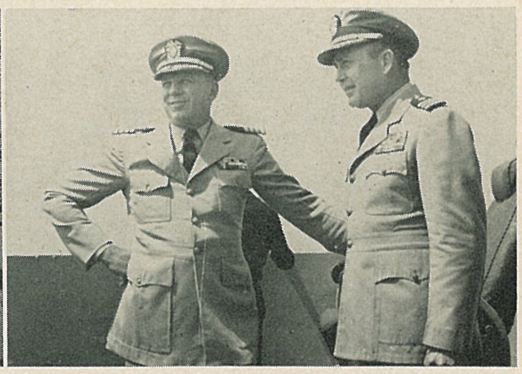
Watts will continue to maintain offices at General Dynamics—Western Group headquarters in Bldg. 19, San Diego.

Dynamics Emblem Installed in Bldg. 19

A large multi-colored General Dynamics emblem now decorates the main hallway of Bldg. 19's first floor at San Diego. The official GD emblem, in eight colors, was installed in front of the elevators by University Shade and Linoleum Co., under supervision of GD/Convair plant engineering.

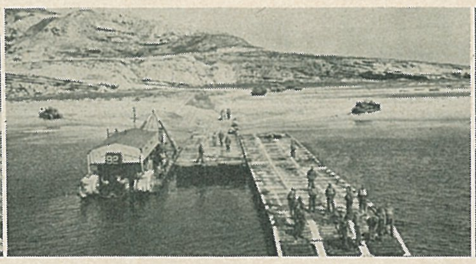
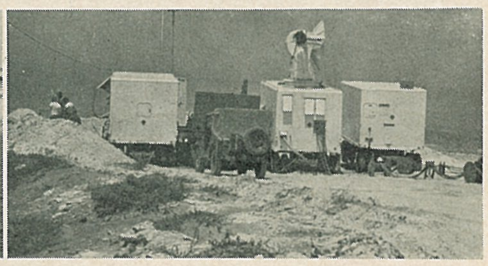




FROM LAND AND SEA—Joint Navy-Marine exercise pitted Advanced Terriers against other missiles. At left above, taken on San Nicolas Island off Southern California coast, is unusual shot of four Advanced Terriers on Marine launcher. In center, Terrier minus wings is fired almost vertically. It followed ballistic course. At right Advanced Terrier is fired from USS Norton Sound. Targets were early models of Terrier and Regulus II missiles.—U.S. Navy photos.

ABOARD SHIP—Scenes are aboard USS Norton Sound during anti-missile firings. At left Cdr. R. J. Wooten, ship operations officer, and Cdr. S. B. Stephens, missile officer, are shown in combat information center. Left center, Ens. M. L. Adams and GM3 Ray interpret missile flight data. Right center, FT3 D. L. Burson, missile launcher operator, and Lt. (jg) C. A. Kennedy, missile battery officer, are at battle stations. At right, Capt. E. P. Bonner, Norton Sound skipper, and Cdr. Jack Alley, executive officer, chat on bridge. Alley was formerly executive officer for NIO at Pomona.



ON SAN NICOLAS—At left first truck of 1st MAAM Bn. comes ashore from LST. Right center shows causeway over which Marines landed equipment for island exercise. At right are Marine Corps radar and fire control equipment. Landing was part of Operation Tophat, demonstrating Advanced Terrier missile's accuracy in intercepting speedy targets.

Full Year of Technical Writing Course Ends For Ten at Convair

Ten General Dynamics/Convair men and women last month completed a full year's technical writing program coordinated through GD/Convair educational services.

The ten graduates, eight men and two women, are survivors of a class of 22 who entered the course last June. Since then, they have had 36 hours of basic writing; 30 hours, advanced; and just rounded out the comprehensive training with 60 hours workshop in practical engineering writing. Instructor throughout was Louie Henderson of service publications.

Emphasizing the importance of such training, L. J. Solheid, service publications supervisor, in addressing the graduating class, said, "We're all aware of technological advances of the past decade. Most of us are aware of the current population explosion throughout the world, but few are aware of the scope and significance of the simultaneous technical communications explosion. To a certain extent today—and definitely within the next ten years—our rate of technological progress will be limited and controlled by our ability to compile, record, research, and transmit vast amounts of technical information.

"The nation that can survive and control the technical communication explosion will lead the world in technological progress!" he pointed out.

Of the ten finishing the 126-hour course, one, Vi Nelson, a former publications assistant, has already been upgraded to technical writer. And another, Charles Rector (formerly of GD/Convair jigs and fixtures) made such progress that he was drawn from the class before its completion to join Astro support publications.

Two other technical writing courses, one basic and the other advanced, currently are being taught within the plant. Allan Walden of Dept. 15-6 has 22 students in basic writing while Henderson's 16 advanced students will go into workshop in September.

Plans are under way for two more basic classes to start this week on an accelerated basis. Anyone in GD/Convair may sign up this week only by contacting Lee Woll of educational services at ext. 491. Other classes will start with the fall semester.

TURNER RETURNED TO LIBRARY BOARD

Loyd L. Turner, special assistant to the division president at GD/Fort Worth, was recently reelected president of the Fort Worth Public Library board for a two-year term.

'Indian' and Arrow Spice Atlas Parade

FORBES AFB—A Topeka GD/Astro girl, dressed as an Indian maiden and part of an "Arrows to Atlas" parade float commemorating Kansas' centennial, added more realism to the event than was scheduled.

"Girls, look alive back there! Act your parts!" Glenn Parsons, Astro communication administrator, called from the cab of the towing truck.

The "Indian girl" promptly aimed her bow and arrow down the main street and let fly! Parsons closed his eyes and murmured a quick prayer, which may or may not have influenced the arrow to miss spectators and fall harmlessly in the street, which it did.

Physics Association Elects FW Prexy

Bob Shockley Sr., health physicist, has been elected temporary president of the newly formed North-East Texas Health Physics Association.

The association will become a chapter after bylaws are approved by the national society.

Over 20 members joined the association at an organization meeting June 20. Persons interested in joining should contact Doyle Eastes, membership chairman, at ext. 3381.

Navy, Marines Fire Advanced Terriers In Joint Maneuvers

The U. S. Navy's Advanced Terrier, manufactured by General Dynamics/Pomona Division, was successfully used as an anti-missile missile in a joint Navy-Marine Corps operation conducted last summer off the coast of Southern California.

Targets for the Advanced Terrier were the earlier production Terrier and the Regulus II missiles.

Officially designated "Project TOPHAT" (Terrier Operational Proof High Altitude Target), the primary purpose of the operation was to demonstrate that Advanced Terrier missiles could intercept supersonic targets.

The earlier Terrier, built in quantity by Convair Pomona and at present the primary anti-aircraft armament for several U. S. Navy ships, is gradually being replaced by Advanced Terrier.

The Applied Physics Laboratory (APL) of Johns Hopkins University converted the early Terrier missiles into target drones, under the direction of A. R. Eaton Jr. The conversion included, among other components, a radar "beacon" to permit easier tracking of the target and a device for measuring the nearest approach of the intercepting Advanced Terrier.

Participating in "Project TOPHAT" were the USS Norton Sound (AVM-1) and elements of the Marine Corps' First Medium Anti-Aircraft Missile Battalion. Capt. E. P. Bonner, USN, commanding officer of the Norton Sound, served as project director.

Units of the 1st MAAM Bn. were deployed to San Nicolas Island, approximately 50 miles off the California coast, and launched the target Terriers from positions on the island. The USS Norton Sound (AVM-1), operating near San Nicolas Island, fired Advanced Terriers at the Terrier targets.

Both the Norton Sound and Marine units also fired Advanced Terriers at Regulus II missiles during the operation.

P. F. Dens, Advanced Terrier project engineer, coordinated the Pomona effort in the operation.

E. C. "Gene" Posers, Pomona field service representative assigned to the Norton Sound, was aboard the ship for the entire operation. H. C. "Herb" Stowers, field service representative with the First MAAM Bn., was on San Nicolas Island during most of the operation. Numerous other representatives from GD/Pomona, APL, and other interested activities were also present during various phases of the operation.

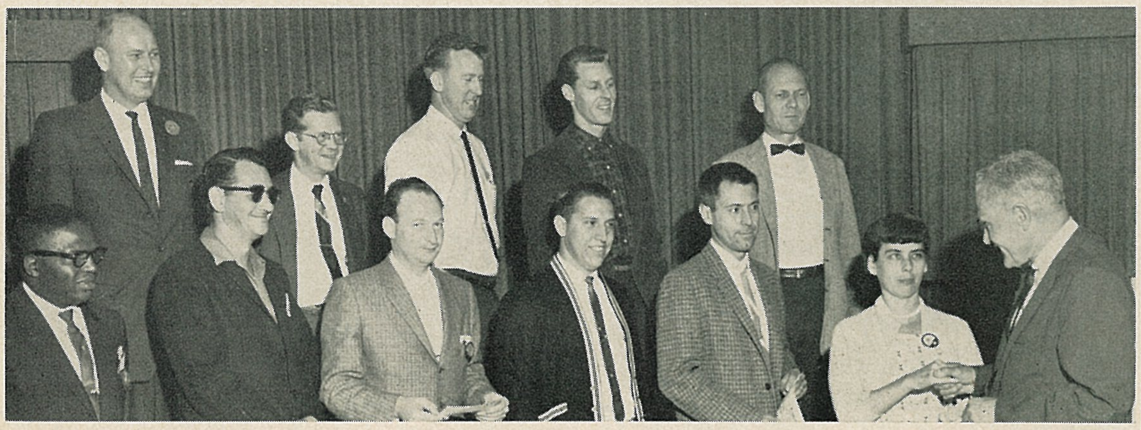
CONVAIR ENGINEERS TO START CLASS IN READING RUSSIAN

A course in Russian will start tomorrow (July 6) for General Dynamics/Convair people, mostly engineers who need a knowledge of the language for reading technical and scientific reports.

Arranged by GD/Convair educational services, classes will meet twice a week, Tuesdays and Thursdays, from 4:30 to 5:30 p.m. in Bldg. 19. Instructor is Vic Hudson of Dept. 6.

Hudson is well versed in the language. He was born in Russia and spent his childhood in different parts of China attending Russian schools. He worked his way through the University of California translating Russian documents for the Department of Agriculture.

Since the 15-week course is limited to 20 persons, first chance will be given those who have already expressed an interest in study of the Russian language. However, R. M. Budz, educational services coordinator for the program, is taking registrations at ext. 1548, Plant 1, and said that more courses will be scheduled to accommodate all signing.



GRADUATING WRITERS—At right, H. W. Rubottom, chief GD/Convair educational services, hands Rosalie Baker (Dept. 15) certificate of completion at "graduation" of GD/Convair technical writing class. Others are, from left (front row), Louie Henderson, instructor; Ken Wirebaugh, Norman Holt, Gene Webster, Jim Yeates; (back row) L. J. Solheid, service publications supervisor; Ray Goodwin, B. J. Jiles, Dick Vopat, Gene Cowgill. Another graduate, Vi Nelson, is not shown.



MASTERPIECE—Astro's Al Widmer gently adjusts latest "bottled" miniature. Note tiny bottle in foreground (blown for him by K. L. Hodapp) which contains fully-rigged schooner.

Bottled Goods

Ocean-Going Hobby Continued By Ex-Sailor Now With Astro

It is difficult enough to build tiny replicas of sailing ships or stage coaches, but Al Widmer compounds the problem by building inside glass bottles.

The General Dynamics/Astronautics (Dept. 250-7) man learned the art during two decades in the merchant marine. It is a time-honored hobby of seafaring men.

Widmer has built more than a dozen "bottled" creations and nearing completion is a project of superlative complexity. It shows a tiny sailor seated at a ship's capstan. He will be holding another bottle (less than an inch in length) inside of which is a tiny schooner model.

"Building in bottles takes steady hands and patience," said Widmer. "The smaller the job, the more difficult."

Widmer demands absolute accuracy in his models, even to the size of the "waves" a ship rides. "Many ships in bottles are inaccurate because builders put a model under full sail on a base built like a rough sea," he scoffs. "Unless the seas are fairly calm, no skipper would run under full sail."

When he left the sea Widmer carried third engineer's papers. During five years at GD/Astro he has performed similar engineering duties in the power house.

"Models to be mounted in bottles are first fully assembled outside," he explained. "Then the finished product is carefully disassembled or 'dissected' so that all parts will fit through the neck of the bottle."

Now each part is edged inside and fitted together again. Most are made from balsa wood, although harder materials such as maple are used for more delicate models.

"I use various sizes of tweezers and make many of the tools myself from darning needles or wire," Widmer added. "Each job calls for different tools."

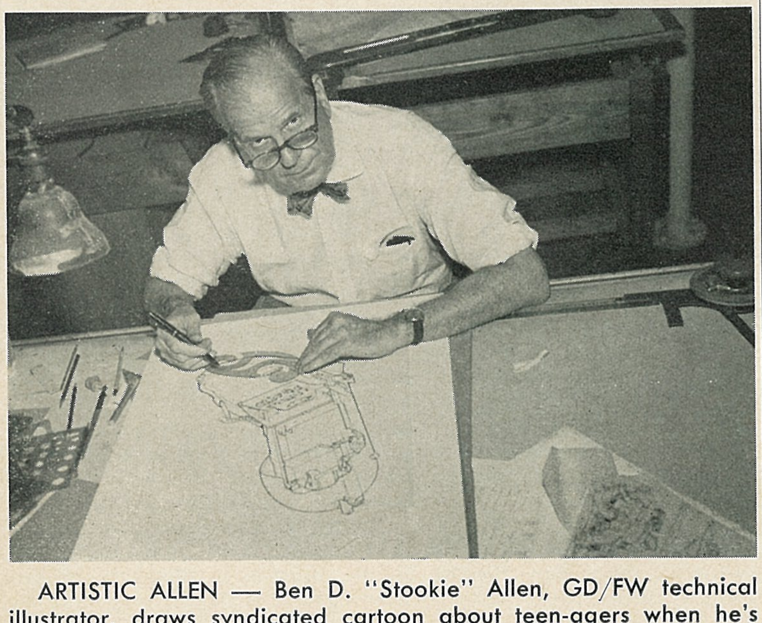
Prize of his collection is his square-rigger, which has 21 sails, 52 sets of rigging, deckhouses, life boats, gun ports and even railings.

Fort Worth Technical Illustrator Once Sketched WW II Front Lines

Ben D. "Stookie" Allen, a technical illustrator for General Dynamics/Fort Worth by day, is a syndicated cartoonist in his leisure hours during which he draws "Keen Teens."

Allen was a World War II combat engineer and in his spare moments made front-line sketches of installations his unit was building. Some of them are still displayed in the Library of Congress and in engineering schools at University of Texas and Kansas.

Allen began cartooning while a student at University of Texas and later attended the Art Institute of Chicago on scholarship. Since then he has been a reporter and cartoonist for newspapers and magazines from New York to California. He has been with GD/FW for two years.



ARTISTIC ALLEN — Ben D. "Stookie" Allen, GD/FW technical illustrator, draws syndicated cartoon about teen-agers when he's not on job. Nobody knows why he wears glasses—he always looks over them.

Toot! Toot!

Toddler Insists on Daily Trip As Engineer of 'Locomotive'

World's youngest "locomotive engineer" is probably Carolyn Sue Hopkins, 13-month-old daughter of General Dynamics/Fort Worth engineer Ralph N. Hopkins.

Last November, Hopkins installed a miniature train and 200 feet of track in his back yard as a birthday gift to his 4-year-old son, Johnnie. The train includes a real locomotive, complete with headlights and whistle. It's battery-operated.

Recently, Hopkins got a frantic call at work from his wife.

"Carolyn Sue's running the train by herself! What shall I do?"

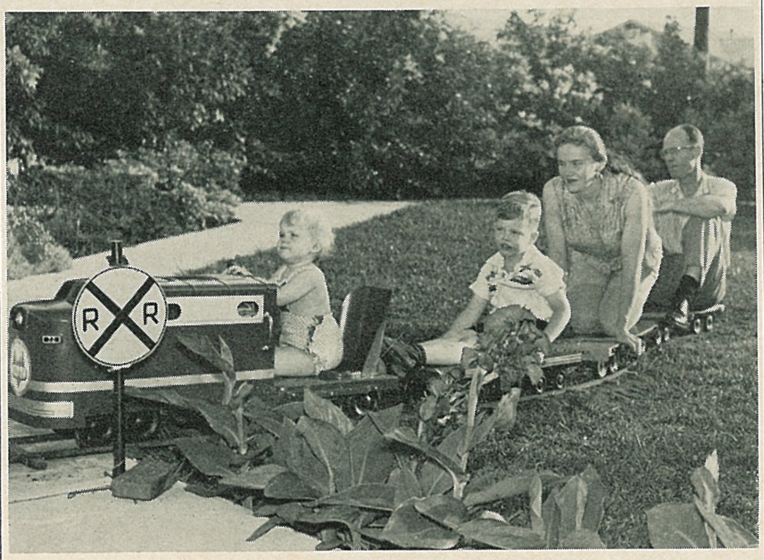
Mrs. Hopkins managed to stop the train before Carolyn Sue fell off. Hopkins then installed a secret switch on the engine. But Carolyn found the new switch, soon learned to operate it, too. Ever since, the blue-eyed blonde, who's just learning to walk and talk, has been whizzing around the track at least two hours a day.

Her red-headed brother, who had hoped to be the railroad's chief engineer, now has to content himself with being president of the line.

Hopkins has his own model railroad in an upstairs den at his home, including many models of antique railroad cars and locomotives.

Mrs. Hopkins, a singer and guitarist who once had her own radio show, is a former Convair employee. She often appeared on Pat Boone's locally-originated TV show when the young singer was getting his start.

Being wife and mother to a three-member railroad crew takes up all her time now.



LITTLEST ENGINEER—Carolyn Sue Hopkins, 13 months, is just learning to talk, but she's whiz in cab of battery-powered locomotive on back yard train. She taught herself. Also on board is brother Johnnie, 4, and Mother and Dad.



OWL EYES—Pretty Judy Bolton of Astro's Altus AFB security office mocks big-eyed stare of owl decoys, ordered to scare pigeons.

Whoo! Whoo! Phony Owls Ordered As Last Resort in Pigeon War

ALTUS AFB, OKLA.—"Owl decoys . . . OWL DECOYS . . . Yes it's correct as written. That's what I need!"

It was Clyde Alfred, GD/Astronautics supervisor here, speaking on the telephone and it was his second insistence that day on an order for special supplies.

Alfred was carrying out an idea, one of several that had been attempted to solve a peculiar problem.

Among Astronautics facilities here are warehouse areas used previously as aircraft hangars. Most are lofty structures with high rafters. And most are "home" to hundreds of birds—particularly pigeons which have little regard for costly Atlas equipment stored below them.

Various means have been employed to get rid of them, so far without notable success. Alfred's idea—suspending owl decoys from wires—dates back to a trick he learned while hunting blackbirds in California.

At press time no information was available as to whether the fake owls have caused the pigeons to leave home.

F-106 and B-58 Figure In Sonic Boom Study

Two General Dynamics supersonic planes, the B-58 and the F-106, will figure in an investigation of the sonic boom.

Coordinated by the National Aeronautics and Space Administration, Air Force, and Federal Aviation Agency, the study will search out methods of predicting and minimizing effects of the phenomenon.

Technical teams from the three agencies are scheduled to begin the six-month program this month. Research will be divided into four projects—sonic boom generation and propagation; design considerations, and operational procedures to minimize intensity; and effects of sonic boom.



DEBUT — Entertainer Wesley M. Schlagenhauf of GD/Convair will be almost 63 years old when he faces first large audience this weekend.

Late Starter

'One-Man Band' To Appear For Fair Visitors

Though he started later than most performers, Wesley M. Schlagenhauf is moving right along in the world of entertainment.

Exactly six months ago he conceived an idea for an act and he will present it for the first time July 8 and 9 at the Southern California Exposition and San Diego County Fair at Del Mar.

Schlagenhauf will be facing his first large audience five days before his 63rd birthday!

He accounts for his rather late debut with the explanation: "I have more ambition now than when I was younger." Schlagenhauf joined Consolidated Vultee in Buffalo in 1929, is now in General Dynamics/Convair Dept. 145.

Undoubtedly, the most intent members of the audience will be children when Schlagenhauf takes the stage. His act is especially designed for their entertainment.

Schlagenhauf sets puppets to dancing on a plywood board by rapping on a piece of sponge rubber. He guides the puppets by a handle which protrudes from their backs. What adds interest is the fact that the Convair man plays the harmonica at the same time and the puppets dance in step. A wire stand holds the harmonica near Schlagenhauf's mouth, thus leaving his hands free.

On Sunday, Schlagenhauf will leave the puppets at home and present a concert instead, playing the piano and harmonica at the same time.

Schlagenhauf says he hasn't told the show's producers yet, but he intends to end his Sunday show with an old-fashioned clog dance.

Engineer Society Votes Five FW Men

Five GD/FW Dept. 6 employees are newly-elected officers of the West Texas Section, American Society of Mechanical Engineers.

They are LeRoy E. Erwin, vice chairman; W. L. Nix, treasurer; Billy J. Pendley, publicity chairman; Billy T. Lowrey, attendance chairman and J. I. Koger, director.

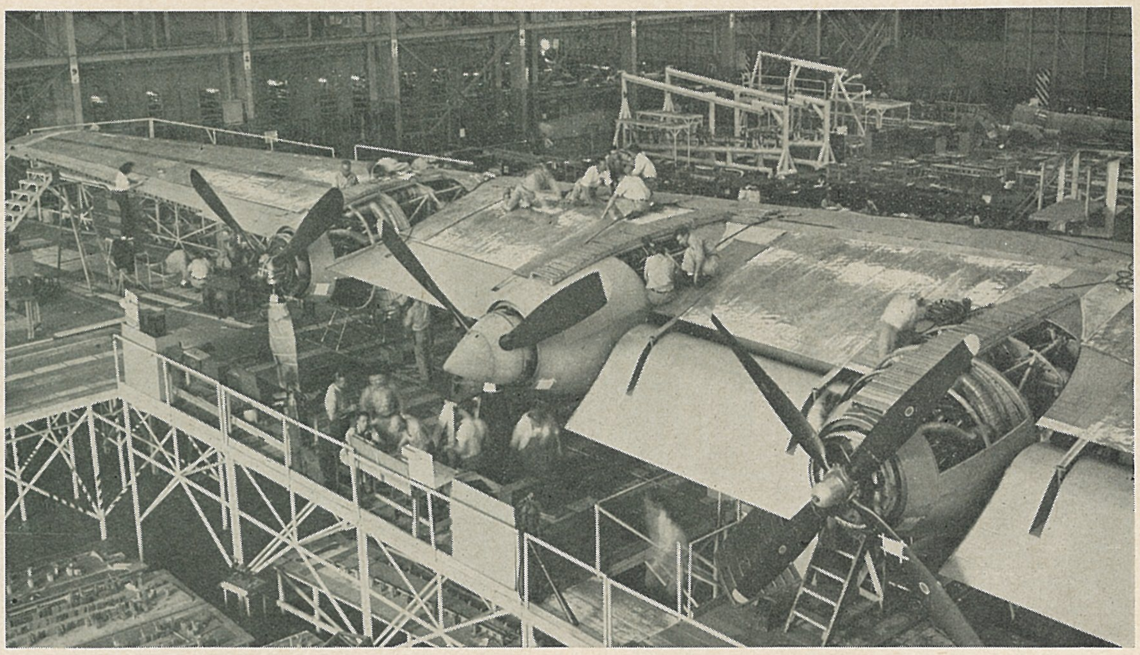
The group achieved full status as a section of the organization July 1, with Fort Worth headquarters. It formerly was a subsection of the North Texas Section.

MYSTERY LOCKER DELIVERED AT FW

A freight shipment to General Dynamics/Fort Worth recently included a foot locker (containing clothing and personal effects) labeled only "R. A. Huchington." There is no such name on FW employment rolls. Meanwhile, industrial security is holding the locker.



MAN OF THE YEAR—General Dynamics/Convair Management Club bestowed its highest honor, the Man of the Year Award, on Ed Caldwell (left), general supervisor-inspection, at June 24 meeting. J. H. Famme, GD/Convair vice president-operations, made presentation.



XB-36 IN 1946—Wing assembly on XB-36 nears completion at Fort Worth in this photo taken in May of 1946.



JOB WELL DONE—L. G. Lawson, seated, outgoing president of GD/Convair Management Club, receives clock desk set from Roy Dill, incoming club president, in appreciation for work accomplished during past year. Board members watching proceeding are (from left) C. L. Ambler, E. V. Laird, E. R. Fink, R. M. Montgomery, R. H. Lange. Lawson also received plaque from NMA in recognition of his outstandingly successful administration.



NO. 1—Donald K. Score, industrial electrical apprentice in GD/Convair Dept. 25, proudly displays permanent plaque bearing his name as 1961 Outstanding Apprentice. Score was misidentified as Don Skorr in June 21 Convairiety.

20-Yr. Veteran Honored by AF On Long Service

A civilian employee in the Air Force Audit Office at General Dynamics/Convair was honored last month for 20 years in government service.

George R. Curtiss, supervisory auditor, received his 20-year pin and certificate of service from Lt. Col. Charles J. Kunzelman, AF resident auditor.

Curtiss has been assigned to the General Dynamics AF Audit Office in San Diego since it was established in July, 1958. Before coming to the San Diego post he had spent three years in a similar function with the Air Force at Sacramento, Calif.

Other government assignments included 12 years attached to the Navy office at Ryan Aeronautical Co. and two other shorter-term assignments with the Navy Audit Office at Convair.



LONG SERVICE—George R. Curtiss (right) of AF Audit Office at General Dynamics in San Diego receives 20-year service award from Lt. Col. C. J. Kunzelman, AF resident auditor. Curtiss served two previous tours of duty with Navy Audit Office at Convair and joined AF Office at San Diego in July 1958.

GD/Astro Son Cracks State Vault Record

A General Dynamics/Astronautics son finished his high school career in a blaze of glory last month by smashing the state pole vault record and capturing second place in national competition.

He is Mike Graves, 18, son of R. G. Graves, Dept. 220-6, a recent El Cajon High graduate.

At the state scholastic track meet in Los Angeles, Mike shattered the previous 14-foot one-inch record by clearing 14-feet 2¼-inches. In other official tries he had conquered 14-3½, and has logged unofficial jumps of 14-6.

In national scorings at the Golden West meet in mid-June however, Mike was in a slump, and placed second at 14-feet ¾-inches.

The rangy pole vaulter took up the sport four years ago, with the encouragement of his father



POLE VAULTER—Mike Graves, 18, GD/Astro son, set new California mark at scholastic meet in Los Angeles.

who set up a vaulting bar and pit in the family's back yard. As a junior, Mike was vaulting 14 feet in Class B competition, bettering previous class records by nearly a foot.

With high school behind him, Mike's future seems secure, as his biggest problem lies in selecting one of several college scholarships which have been offered.

Astro Acceptance Number on License

For some unknown reason New Jersey license plates seem to be connected with General Dynamics products and people.

First, a "FLY 880" plate was reported seen in the state. Now, Robert W. A. Johnston, GD/Astronautics representative in Levittown, writes that his neighbor's license plate is "CVA 576," exactly the same as Johnston's inspection acceptance stamp number!

Troubled Times

Mounting Convair-Liner Loss Created a 'Special Situation'

(This is the 62nd installment in a continuing history of Convair.)

Operating losses during development of the Convair-Liner led to changed managing ownership and a refinancing program in 1947-48. Convair's net income the last war year, 1945, had been $6.7 million on sales totaling $644 million. In 1946 sales amounted to only $13.7 million and the net income column showed a deficit of $2.7 million. The lowest ebb was reached in 1947, when millions were being spent on the Convair-Liner, a steel shortage hampered operations at Nashville, and the B-36 program was still in the early production stage at Fort Worth. The end of the year showed losses of $36 million, with $32.3 charged to the Convair-Liner program. After tax recoveries, the loss was still $16.7 million.

This was a "special situation" that appealed to Floyd Odlum, president of Atlas Corp., a veteran investment company. He defined a special situation as one in which the potential assets of a company seemed to outweigh its immediate liabilities. Atlas acquired 117,200 shares of CVAC stock (about 7 per cent of the total) in the open market during the summer of 1947. Negotiations followed between executives of Atlas and AVCO (26 per cent) leading to a proposed transaction:

(1) AVCO would withdraw from CVAC, surrendering its stock and paying an additional sum in cash to acquire effective ownership of the Nashville property and ACF-Brill.

(2) This would leave Atlas the controlling stockholder (10 per cent after retirement of AVCO's shares). Nine directors nominated by Atlas would replace nine AVCO men on the CVAC board.

A contract signed in October was ratified at a CVAC stockholders meeting Nov. 6, 1947, and the board was reorganized at a meeting Nov. 20, with Odlum replacing Babcock as chairman. A year-end audit showed the company's position was worse than anticipated—losses and inventory write-downs had reduced working capital below the capital/loans ratio required by the banks. An issue of 1,159,849 additional shares of common was sold to existing stockholders in 1948, increasing capital funds by $10.3 million, and a new commercial loan arrangement was made with a group of banks. Dividends, dropped to 50 cents in 1947, were omitted entirely in 1948 and 1949.

LaMotte T. Cohu, president of Trans World Airlines and former general manager of Northrop Aircraft Corp., was named Convair president June 4, 1948. I. M. Laddon, a director since 1931 and executive vice president since 1942, resigned but continued to serve on the board.

The Vultee Field Division at Downey had been shut down in July, 1947, and its experimental plane, missile and rocket projects transferred to San Diego. The Downey property was leased to North American Aviation, Inc., early in 1948 and further retrenchment followed that summer with shutdown of the Stinson Division. Stinson turned out nearly 5,000 Voyagers and Flying Station Wagons after the war, producing 44 per cent of all four-place private craft sold in 1947. The Michigan plant then succumbed to quick saturation of the civilian plane market. (Nationally, production fell off from 34,874 units in 1946 to 15,616 units in 1947.) The plant was closed June 30 and on Dec. 1 Convair sold the Stinson tools, designs, name and good will to Piper Aircraft Corp.



RCAF CHECKOUT—First Royal Canadian AF officer checked out in Convair F-106 is Group Capt. A. L. Bocking, deputy commander of Duluth NORAD Sector. He took 40-hour Mobile Training Detachment course at Duluth Air Base, Minn., before recent qualifying flight in F-106, 64th different-type aircraft he is qualified to fly.

Wayne Hines Golf Winner Over McCord

Wayne Hines is the new "king" of the Convair Golf Club following a two-up victory over Mac McCord in the finals of the championship event June 25 at Flying Hills.

Next Convair Golf Club sweepstakes have been set for July 22-23 at Caliente. After July 17, starting times may be reserved by calling Juanita at ext. 1158, GD/Astronautics.

Hines is from GD/Convair, McCord from GD/Astronautics.

The annual event was held June 11, 18, 24 and 25 and drew contestants from both divisions.

B. Markey took the first flight with a 3-2 win over J. W. Jackman. The second flight went to Mark Pruitt in a 2-1 victory over Ed Caldwell.

Third flight victor was E. Moriel who downed Ken Eastin, 3-2. C. Lepper paced the fourth flight with a 3-2 win over I. Raney. Fifth flight honors fell to John Serafin. E. Balcewicz downed D. Scott, 2-1, to win the sixth flight with D. Spencer taking a one-up win over Henry Araiza in the seventh and final flight.

GD Wives Head Benefit Effort

Wives of General Dynamics employees are active in Clairemont Women's Club committees for the group's annual "Day at the Races" slated for July 22.

Chairman of the Caliente event is Mrs. Robert C. White, publicity chairman is Mrs. Laureno Rodrigues Jr., and Mrs. Leonard Foglesong is co-chairman of the ticket committee. All are wives of GD/Astronautics men. A GD/Convair wife, Mrs. William Stemple, is chairman of the hostess committee.

Proceeds from the event will benefit patients of San Diego Day Treatment Center, and tickets at $3 each are available from Mrs. Foglesong (BR-3-1242).

Industrial Relations Wins Volley Play-Off

Industrial Relations took two straight games 15-11 and 15-13 from Electrical June 21 to win the championship play-off of the Convair shop volleyball league.

Industrial Relations was winner of the second round of play with seven straight victories; Electrical earned a shot at the title by winning the first round, beating both Astro Data and Industrial Relations in a playoff.

Informal volleyball games will be permitted in the Balboa Park Federal Bldg. from 7-10 p.m. each Wednesday. GD families are invited to participate.



STARS OF '70—Convair Little Leaguers, sponsored by GD/Convair people at Holloman AFB, N.M., are, front row (left to right): Mike Mirabal, Gary Gholson, Mark Miller, Paul Perca, George Rhodes, Jess Marquez; second row, from left, Ricky Gholson, Don Roeder, Mike Miller, Mike Padilla, Don Morgan, Charles Orr, Billy Arcos, and (kneeling) David Orr, bat boy. In rear are GD/Convair dads who coach team, George Rhodes and Lou Padilla. Team members not pictured are Steve Hinkle, Bobby Brisendine, Duane Ellis.

Astro Shooters Edge Convair For IRC Pistol Championship

Pistol teams from GD/Convair and GD/Astronautics outshot the field at the annual Industrial Recreation Council Shoot June 25.

The Convair and Astro entries were so well matched that they ended up in a tie for first place with identical scores of 1,146. To break the tie, the number of "dead center" hits was counted and the Astro Green Team was the victor over the Convair No. 1 squad with 36 "Xs" against 26 "Xs."

Filling out the top three was the Astro Red Team with a score of 1,118. Other GD teams finished as follows: Convair No. 2 placed eighth; Astro Blue placed 10th; Convair No. 3 was 11th; Astro Gold ranked 13th; Astro Silver was 14th and a combined Astro-Convair pickup team came in 15th.

Members and individual scores of the championship Astro team were Glen Myers, 285, 9X; Ronnie Legg, 286, 10X; Ralph Sanderlin, 287, 8X; Bob Geopfarth, 288, 9X.

On the top Convair squad, shooters and scores were Jim Halfacre, 290, 9X; Carl Hornburg, 287, 5X; E. E. Bickar, 281, 3X; B. L. Broadway, 288, 9X.

A new pistol team, selected on the basis of aggregate scores, has been chosen to represent the Convair club during the next three months.

Members and aggregate scores are Halfacre, 806; Hornburg, 783; Bickar, 759; and CRA Commissioner Ash Bishop, 732.

Flying Club Picks Convair Officers

Three GD/Convair men will be installed as officers of Consair Flyers Club, Inc., at a 7:30 p.m. meeting July 14 at Montgomery Field cafeteria.

Taking office in the flying group will be Harold L. Robinson (Dept. 6), president; Gustave W. Schwartz (Dept. 69), maintenance officer; and Richard T. Priestly (Dept. 6), corresponding secretary.

Information concerning Consair membership and activities can be obtained by calling Robinson, ext. 2421, Plant 1.

Dept. 97 Moves Up In Softball League

Convair shop league softball standings underwent a slight shuffle during the past two weeks with Dept. 97 moving into a second place tie behind the league-leading Dept. 137.

After six games, team records are Dept. 137, 5-1; Dept. 97, 4-2; Rose Canyon, 4-2; Electronics, 3½-1½; Dept. 135, 3-3; Dynamics, 3-3; Material, 1-5; and Dept. 400, ½-5½.

Astro Son, Daughter Honored as Scholars

Two children of General Dynamics/Astro's Sam Arrisi of Dept. 773 have been honored with a scholarship and student research grant respectively.

Judy Turley, 20, has received a cardiovascular research grant at the University of California Medical School in San Francisco, presented by the California Heart Association. She is a senior biology major at San Diego College for Women where she was the highest-ranking junior student. She was 1958 Kearny High School valedictorian.

John Turley, 17, a 1961 graduate of Kearny High School, received the Kearny Mesa Woman's Club scholarship. He held offices in the choir, Key Club and Science Club at Kearny and was named the outstanding gymnast in both 1960 and 1961 at that school. He has been accepted at Colorado School of Mines to study geophysical engineering.

Astro Notes Taking Rest For Summer

After a successful season during which the group performed at a variety of events throughout the San Diego area, CRA Astro Notes have suspended their activities for the summer.

The choral group will resume rehearsals in September, when new club members will be encouraged to join. C. P. Rolla is CRA commissioner.

Saturday Schedule For Salvage Yards

Salvage yards at GD/Convair and GD/Astronautics plants will be open to employee sales Saturday mornings on the following alternating schedule:

GD/Convair—July 8 and 22.
GD/Astro—July 15 and 29.



NEW JOURNEYMAN—Frank E. Sladek Jr. (at left), now assigned to GD/Astronautics plaster shop, is latest graduate from GD/Convair four-year apprentice program. He received journeyman certificate from O. W. Sweetland (right), superintendent of tool manufacturing, as H. W. Meyers, tool manufacturing general foreman, looks on.

Road Runners Elect Officers

Convair Road Runners, one of CRA's most rapidly growing groups, have elected Ralph East and Harry Rush president and vice president, respectively.

Other new officers are Iris Scholl, secretary, and Carl Cooper, treasurer. Members of the judicial board include George Hurley, Ed Miner, Hal Perkins, Harry Rush, Lowell Ward and Ted Wienberg.

More than 100 travelers were expected to attend the club's outing over the past weekend to Laguna Public Camp, some 65 miles east of San Diego.

Weekend events planned by wagonmaster Lowell Ward and his assistant, Ray Hanson, included a hamburger fry on Saturday and free sausage and pancake breakfast Sunday. Workers commuted to San Diego on Monday and rejoined families at camp for the Fourth of July holiday.

Delta Team Wins Spearfish Event With 90-lb. Catch

A Delta Diver spearfishing team placed first in the San Diego Council of Skindiving Club's elimination event last month.

Jim Carpenter, Bob Casebolt, and Chuck Nicklin brought up almost twice as many pounds of fish than the next best team as they qualified for the Pacific Coast Championships to be held off La Jolla July 23. Of the 20 San Diego teams competing, the top five qualifying teams and their hauls were: Delta Divers with 90 lbs., 14 oz.; Addicts No. 2 team, 54 lbs., 10½ oz.; Ryan Reefraiders, 50 lbs; Addicts No. 1 team, 48 lbs., 6 oz.; Astro Divers, 27 lbs., 12 oz.

Bob Casebolt (Dept. 6) took individual honors with the largest total aggregate of 39 lbs., 6 oz. Rules of the contest prohibited taking perch and grouper. Required minimum length of each fish taken was 14 inches.

Gatterman Sharp At Mullinix Shoot

Sharpshooting W. U. Gatterman of GD/Convair Dept. 102 ended up in the winner's circle more often than any other contestant at the Adm. H. M. Mullinix Memorial Shoot at Camp Miramar June 16-18.

Gatterman, one of the CRA Gun Club's top shots, placed second in both trap and skeet, breaking 387 of 400 targets. He won the 25 Pair Doubles Class C championship, hitting 46 of 50 attempts. Some 185 of Southern California's best guns entered the shoot.

HUNTER SAFETY DEADLINE NEAR

Last call is out for General Dynamics youngsters under 16 who wish to take a hunter safety class before the opening of hunting season.

Instructor Arnold Schrock requests that all those interested call him at BR-7-4958 to make reservations for the next free class which will run for three consecutive Saturdays beginning July 15.

Sponsored by CRA, youngsters are required to take the course before hunting licenses will be issued to them. Instruction covers handling of .22 rifle and shotgun.

Free Ski Lessons Offered by Club At July Outings

Water skiing activities at GD/Convair will start moving at full throttle during the next couple of weeks with a number of ski lessons slated and a special offer of free lessons extended Convair beginners.

On July 8 and 15, from 9 a.m. to 1 p.m., the club will skim the waters off Tierra del Fuego; on July 12 an evening ski party is planned for 5:30 p.m. at Santa Clara Point and on July 16 the same site will be used for a morning ski between 7 and 11 a.m.

Slalom and jump facilities off Santa Clara Point will be available for use of club members, according to Gene Sevigny, CRA commissioner.

A special invitation is being extended beginners and prospective members to take advantage of free lessons now being offered by the club. Only charge is a 25¢ a mile towing fee which is paid by all skiers.

Additional information concerning club activities is available from one of the following new officers who were elected at a meeting June 22: Don Stacey, commodore, ext. 2910; Earl Erickson, treasurer, ext. 1032; and Bettejeane Shelton, ext. 2481 (all extensions are Plant 1).

Bowlers Needed For Two Leagues

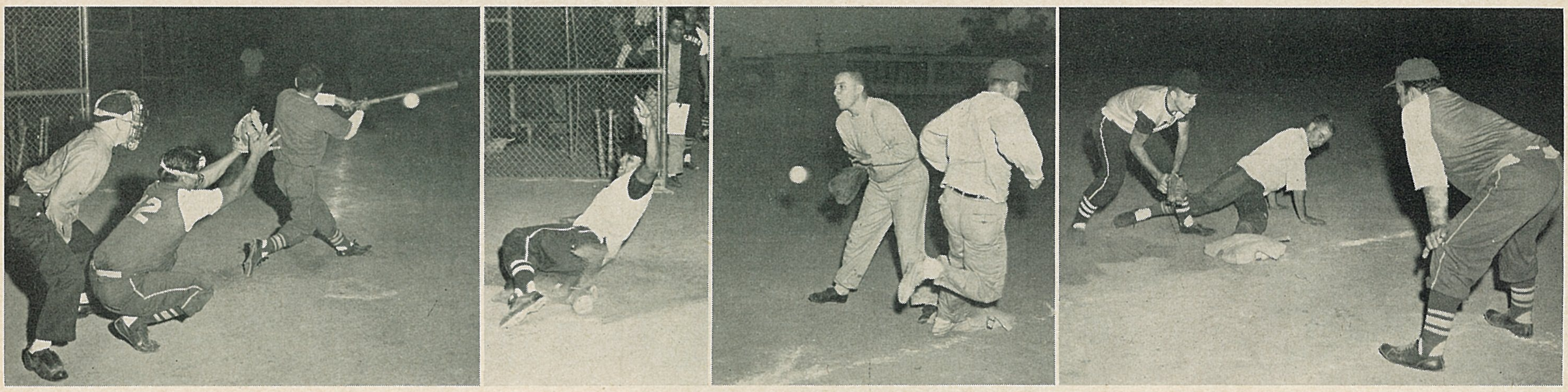
Summer keg leagues are being formed to roll at El Cajon Bowl and Pacific Recreation alleys, said CRA Commissioner Jim Hayman.

A Convair league to bowl either Thursday or Friday evening at El Cajon Bowl will be organized if enough keglers respond. Reservations also are being taken for a 780 to 800 mixed scratch league at Pacific Recreation on Wednesday nights.

Anyone wishing to join either league is asked to contact Hayman, ext. 1155, Plant 1, as soon as possible.



TOP TEAM—Pausing before recent game with Huntington Park are members of Convair-Astro softball team. They are (back row) Frank Castro, Dick Fenton, Art Bunge, Manny Gomes and Jake Striker. In front row are Tom Martinez, manager (left), Bill Doten, Ray Mendez, Eddie Rincon and Dick Smith.



SPIRITED—What Convair shop softball players may lack in practice and polish, they more than make up in enthusiasm as action photos show. Pictures were made June 23 when Material clashed with Dept. 97 and Dept. 135 tangled with Rose Canyon. Dept. 137 was in first place after six games, followed by Dept. 97 and Rose Canyon. Games are played at Cabrillo Playground in Point Loma Monday and Friday evenings. Spectators are invited.

Print Honors Won by Club

Camera enthusiasts at Convair are reaping honors for their expert photography with two Camera Club members singled out for special recognition in the last few weeks.

Leo Vigneault, husband of Aline Vigneault (Dept. 6), was the only Convair club member to receive awards for pictures taken during the annual Photorama contest under sponsorship of Southern California Association of Camera Clubs. His color slides won three honorable mention ribbons at June 14 judging.

Ron Ainsworth's (Dept. 144) black and white "Ransom" (**Convairiety**, Feb. 1, 1961) has been accepted for showing in the Southwest International Salon of Photography at the Del Mar fair this year. The delicate shot of single dewdrops glistening on a spider web had been previously selected for display in the fifth annual Salon of Photography at Jackson, Miss.

Next regular meeting will be July 10 and next quarterly contest of the CRA group will be July 24 at 7:30 p.m., Photo Arts Bldg., Balboa Park. Although the contest is open to members only, visitors are invited to attend. Cash awards will be given best entries in black and white, and color.

Eagles Take First In Softball League

Convair Eagles softball team last week won the first round of Industrial A League competition which qualifies them for the championship play-off at the end of the season.

The Eagles flew into first place by the narrowest of margins—their record, due to a tie, was only one-half game better than the second place Electro-Instruments squad.

The Convair softballers made the top rung by defeating International Longshoremen Workers Union 7-4. In a previous game John Evans led the Eagles to a 5-4 win by smacking a home run with two men on base.

Second round of Industrial A softball starts this week.



TOPS — John Jodka of GD/Convair Dept. 93 received trophy for winning championship of National Management Association Area Golf Tournament at June 24 Mgt. Club meeting.

CRA Sports & Recreation Convairiety

Convair Sons Given $20,000 To Sign Baseball Contracts

Two former Convair Little Leaguers have blossomed into "bonus babies" and last month each received "approximately $20,000" to sign major league contracts.

Boston Red Sox scout, Ray Boone, signed 18-year-old Joe Verdon, son of R. W. Verdon (Dept. 401). A southpaw first baseman and outfielder, Verdon played three years of ball with Hoover High School. Last year he smacked 10 home runs in 23 games and hit for a hefty .435 average.

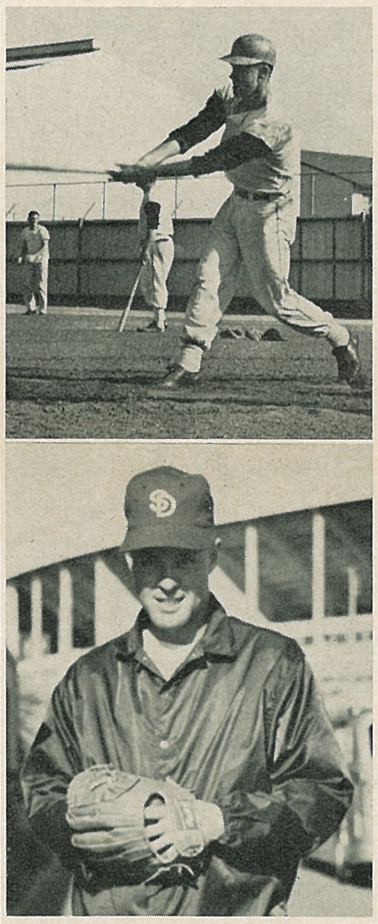
Larry Shuck, 19, son of Ralph Shuck (Dept. 215), was signed by the St. Louis Cardinals. For the past two seasons, Shuck pitched for San Diego City College, notching 14 wins, two losses.

Verdon will start his first season with the Red Sox Pony League farm club in Olean, N.Y. The Cardinals are sending pitcher Shuck to Johnston City, Tenn., in the Appalachian League.

Both of the Convair sons received their initial baseball knowledge from Pete Beyrer of employee services who organized, coached and managed Convair-sponsored Little League and Pony League activity from 1950 to 1957.

Another person who will be taking more than a passing interets in Verdon's career will be M. A. Murphy (Dept. 401). Murphy gave Verdon his first baseball glove at age 8 when the youngster started Little League.

Both players plan to continue their education during the off-season months.



PROS—Convair sons, Joe Verdon (top), 18, first baseman and outfielder, and Larry Shuck, 19, pitcher, signed major league contracts last month, each received bonus of about $20,000.

WATCHES NEEDED BY CAR CLUBBERS FOR FUN EVENT

Sports car enthusiasts will gather tonight (July 5), watches in hand, for a fun-type event after their business meeting in the Natural History Museum, Balboa Park, 7:30 p.m.

Plans are being kept secret until starting time, said Tommy Jackson, club spokesman. But the only equipment needed will be a watch, preferably with a sweep second hand. Prizes will be awarded the top four places.

Other activities for the CRA Sports Car Club during the month will include a Picnic Rallye on July 23. Members also are invited to participate in a South Bay Sports Car Club navigation and seats of pants rally on July 22. Starting place will be South Bay Plaza at midnight. A Ryan Treasure Hunt event is set for July 23, 11 a.m., College Grove Center. Entry fee is 50 cents. The Rohr club will hold a Championship Countdown Rally II, 7 a.m., from Cabrillo Lanes, Chula Vista. Post entry cost is $6.

Free Archery Lessons To Start Next Week

A series of free archery lessons will start next week for Convair people through arrangements of the Convair Archery Club in conjunction with the Southern Border Archery Association.

Al Phipps, CRA archery commissioner, said that first of the five classes will be next Wednesday (July 12) at 8 p.m. in the Conference Bldg., Balboa Park. Registration can be made at that time or by calling Phipps at his home phone, CY-5-8194.

Next three lessons will be held weekly on Wednesday nights, July 19-26, Aug. 2, at the same time and place. Date and location of the last lesson will be announced at the opening session. Each lesson runs for one hour. The entire course is offered without charge to anyone interested, said Phipps.

Text of instruction is furnished by the nationally-known Howard Hill Co. and covers every phase of shooting the bow. Four competent instructors who have had wide experience in teaching archery will be on hand. They include two Convair men, Phipps and Harry Ross of Dept. 400, and two from the Southern Border Archery Association.

More instructors will be provided if the turnout demands it.

Next regular field shoot for Convair archers will be this Sunday (July 9) at Balboa Park field range, 9:30 a.m.

Discount Offered For Two Musicals

Tickets go on sale tomorrow morning (July 6) at 9 a.m. at GD/Convair employee services for two coming theater events.

Convair night to "Fanny," musical play at the Circle Arts Theatre, will be July 16. Reduced prices, through CRA arrangements, are $2.75, $2.20, $1.80, and $1.40.

Discount tickets are offered to "The Red Mill," Starlight Opera production, for the night of July 23. Two hundred seats have been reserved for Convair people at a 30 per cent reduction. The discount applies only to $3.50 seats.

Antelope Valley 'Wife of Year' Award Given Mrs. Roy Kurtzman, '60 Prexy

ANTELOPE VALLEY—Presentation of the Antelope Valley Convair Wives Club's "Wife of the Year" award highlighted a June 3 installation of officers meeting at the Antelope Valley Inn.

Recipient of the annual award was Mrs. Roy Kurtzman who is also the outgoing president. As such she presided at the installation ceremonies for new officers.

They include: Mrs. Roy Russell, president; Mrs. Carmen Lopez, vice president; Mrs. Robert Gore, recording secretary; Mrs. Walton Legare, corresponding secretary; and Mrs. Hans Hansen, treasurer.

During the installation, Mrs. Kurtzman presented each new officer with a comic symbol in addition to a club pin. She received, in turn, a walnut plaque and gavel.

As winner of the annual award Mrs. Kurtzman was cited for her outstanding contributions to the community, welfare projects and club service.



VALLEY OFFICERS—Antelope Valley Convair Wives Club recently held installation of officers. From left are Mrs. Walton Legare, corresponding secretary; Mrs. Robert Gore, recording secretary; Mrs. Roy Kurtzman, outgoing president; Mrs. Roy Russell, president, and Mrs. Carmen Lopez, vice president. Absent is Mrs. Hans Hansen, treasurer.

CRA Calendar

(Convair Recreation Association has some 40 activities in operation. For information on Convair sports, call CRA headquarters, ext. 1245, Plant 1.)

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ARCHERY — Field shoot Sunday (July 9), Balboa Park range, 9 a.m. First of series of archery lessons Wednesday (July 12) 8 p.m., Conference Bldg., Balboa Park. Call Al Phipps, CY-5-8194.

ASTRONOMY — Meeting July 21 Gillespie Field recreation area 8 p.m.

BADMINTON — Open play Tuesdays, 7:30 p.m., Federal Bldg., Balboa Park.

BOWLING — Reservations being taken for league at El Cajon Bowl, 780-800 mixed scratch league at Pacific Recreation. Call Jim Hayman, ext. 1155, Plant 1.

BRIDGE CLUB — Sessions every Tuesday, 7:30 p.m., Barcelona Hotel, 326 Juniper St.

CAMERA CLUB — Regular meeting July 10, quarterly contest July 24, both at 7:30 p.m., Photo Arts Bldg., Balboa Park.

GOLF—CRA sweeps July 8-9 Bonita Country Club.

ICE SKATING—Skating sessions at Iceland temporarily discontinued due to change in management.

JUDO—Workouts and instruction each Thursday evening, 7-8:30 p.m., CRA Clubhouse, Pacific Hwy.

MODEL RAILROAD — Meetings each Friday, 7:30 p.m., House of Charm, Balboa Park.

MOVIES—Reduced-price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB — Next shoot Sunday (July 9) 9 a.m. San Diego Police Pistol Range, Federal Blvd. and Home Ave.

RADIO CLUB — Meeting tomorrow (July 6), 7 p.m., Harbor Drive headquarters.

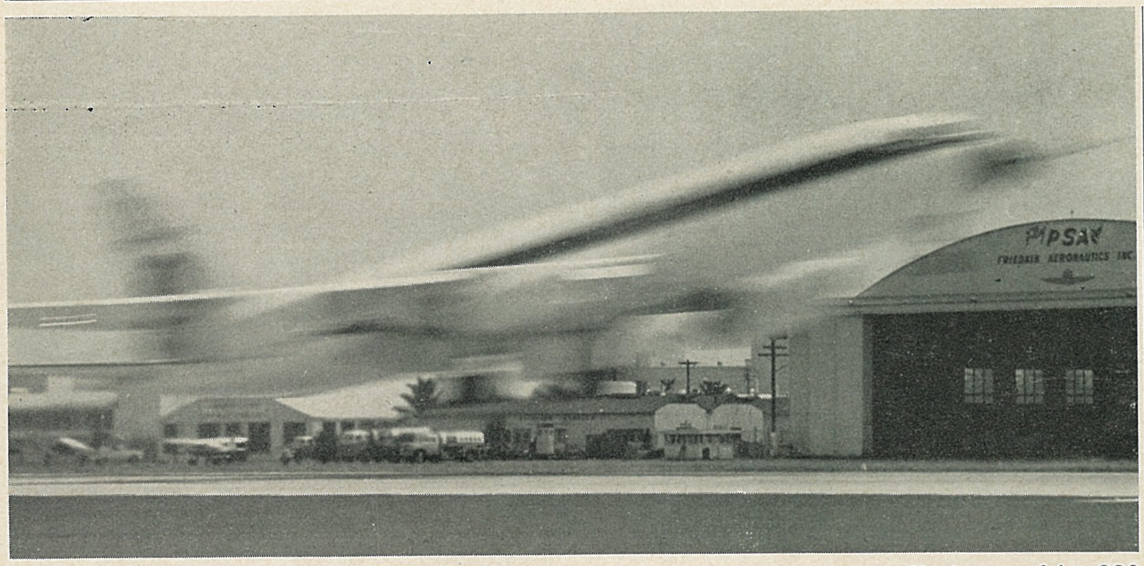
ROLLER SKATING—Convair skate night July 17 at Skateland, Front and G Sts. Free tickets at employee services, Plant 1.

SPORTS CAR CLUB—Meeting and surprise sports car event tonight (July 5), 7:30 p.m., Natural History Museum, Balboa Park.

SWIMMING — Convair family swim night Saturday (July 8), Mission Beach Plunge, 7-9 p.m. Free tickets at Convair employee services.

VOLLEYBALL—Informal play for Convair families each Wednesday, 7-10 p.m., Federal Bldg., Balboa Park.

WATER SKI CLUB — Skiing July 8 and 15, 9 a.m. to 1 p.m., Tierra del Fuego, Mission Bay. Ski party July 12, morning ski July 16, 7-11 a.m., Santa Clara Point.



GHOSTLY TAKEOFF—GD/Convair lensman Pete Autio shot this novel takeoff picture of jet 990 leaving Lindbergh Field. Using an 8½-inch lens, he shot at F32 at 1/30th of a second to achieve effect of blurring speed.



JUST RIGHT—American Airlines cameraman swings aloft in "cherry picker" at GD/Convair to get in perfect position to photograph 990 transport. Unit is being operated from truck bed out of sight at right. Two units were purchased last month, are used most often for fast work on tall tails of 880s and 990s.

'Cherry Pickers' Hoist Maintenance Men Aloft For Quick Jobs on Jets

General Dynamics/Convair inspectors and mechanics are literally "riding high" these days at the end of collapsible boom assemblies commonly referred to as "cherry pickers."

Mounted on a flat truck bed the boom is hydraulically operated and its two main sections can be extended more than 50 feet upward. One man can be accommodated in each of the two bucket seats attached to the end of the second, lightweight fiber glass section.

The units were purchased from Power American Division of the McCabe-Powers Auto Body Co. of St. Louis, Mo.

The Sky Masters are especially being used by GD/Convair for adjustments on vertical stabilizers of the 880 and 990 jet transports. They eliminate the difficult task of moving in huge tail stands needed to support workers.

One Sky Master is being used by field operations at GD/Convair in San Diego; another is being utilized by GD/Convair at Edwards AFB.

The units have other obvious uses, such as maneuvering photographers into good positions for picture taking or lifting maintenance people near hard-to-get-at spots.

Main power for operating the Sky Master is supplied by the truck engine. It is dual-controlled, both from the truck bed and also from one of the bucket seats.



MOBILE — Boom assembly on truck bed is being used at GD/Convair to hoist inspectors and mechanics near high working areas.

CONVAIR AVIATRIX TO ENTER DERBY

A GD/Convair aviatrix will make a third try at speeding crosscountry ahead of 100 other women pilots in the coming Powder Puff Derby.

Terry Vasques, dynamics engineer at GD/Convair, will be No. 30 among women pilots taking off from Montgomery Field near San Diego the morning of July 8. Starting time for takeoffs is 9 a.m. Finish line this year is the airport of the National Aviation Facilities Experimental Center at Atlantic City, N.J.—with the route covering 2,709 statute miles.

Accompanying her this year in the co-pilot's seat of her Beech Bonanza will be Grazia Sartori of Rome, Italy.

Cadet Airman Wins GD Leadership Award

A General Dynamics/Convair award has gone to a member of the 420th Air Force ROTC cadet corps at University of Minnesota, Duluth campus, at this year's annual awards day ceremonies.

Cadet Airman Thomas C. Basterash received the GD/Convair Air Force ROTC Award for "maintaining a positive attitude toward scholastic work and service in the Air Force, and for demonstrating outstanding leadership qualities."

M. L. Hicks to Speak To Value Engineers

M. L. Hicks of General Dynamics/Fort Worth will speak on "New Dimensions in Management" at an open meeting of Dallas-Fort Worth Society, American Value Engineers, July 6 at Hi-Ho Restaurant in Grand Prairie. The dinner meeting starts at 7:30 p.m.

Tickets are available through J. W. Shaffer, Dept. 6, at ext. 3863.

W. G. McMurry, Dept. 3-3, is chairman of the society.

Supersonic Transport World Leadership Key, Says Brig. Gen. Preuss

The U. S. must develop a supersonic transport on a timely basis if it's to maintain world leadership in the commercial transport field.

So opined Brig. Gen. Paul T. Preuss, assistant administrator for plans, Federal Aviation Agency, at a symposium of the Western Region of The Institute of Navigation at Western Hills Hotel June 19-21.

"Preliminary studies indicate the technical feasibility of a long-range supersonic transport," Preuss said, "but a well-organized national effort would be required to produce an economically competitive supersonic transport by 1970."

(A 52-passenger transcontinental transport capable of cruising at Mach 2.4 is being proposed by GD/FW as a test step toward a commercial supersonic transport. Years of experience gained in developing and flying the Mach 2 B-58 Hustler would be used.)

Preuss said the $12 million proposed by FAA for engineering studies and airframe development in fiscal 1962 has been approved by the President and is now before Congress.

Emphasizing the strong role industry must take in developing the supersonic transport, Preuss said roles to be played by three federal agencies look roughly like this:

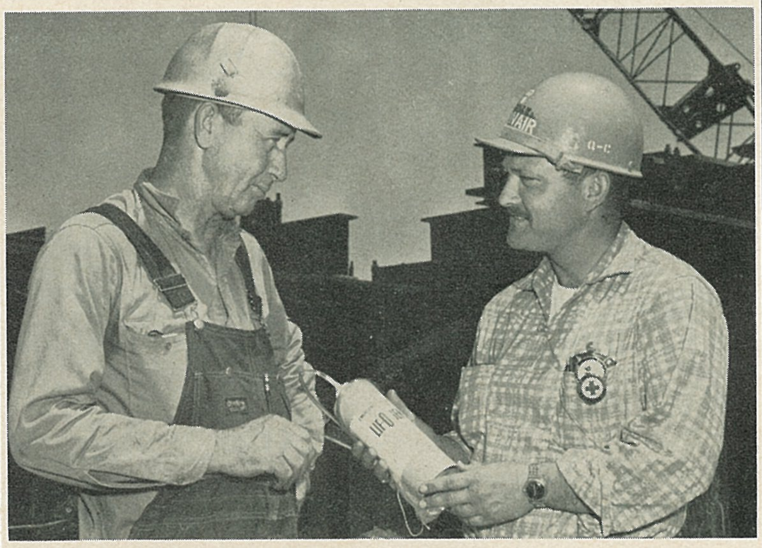
FAA—program leadership and fiscal support; Department of Defense—knowledge, operating experience, research support and other assistance; National Aeronautics and Space Administration—basic research and technical support.

Although the supersonic transport is technically feasible, Preuss said, many complex problems remain in such areas as materials, structures, aerodynamics, engine inlet and nozzles, sonic booms, etc.

(According to an announcement in June 19 "Aviation Week," FAA will soon initiate a six-month flight-test program to determine what effect sonic boom problems will have on future supersonic transport operations.

Under a joint agreement with Air Force and NASA, AF B-58, F-104, F-105 and F-106 planes will make sonic boom measurements at high and low altitudes, with climb and descent maneuvers. Wind tunnel tests will also be conducted, and community surveys will be conducted to get public reaction to booms.)

Two General Dynamics/Fort Worth authorities were on the symposium program. They were: B. A. Erickson, special assistant to the vice president-operations, "Development of the B-58, The Mach 2 Environment"; and L. W. Goodwin, design group engineer, "Auto-Pilot/Navigation Systems Tie-Ins, Airframe."



MANY THANKS—Astro's Don Chandler, right, GD/Astro quality control inspector at Lincoln AFB, holds portable oxygen inhaler similar to one he used to assist Bob Reedy, contractor's employee, left. Latter was overcome by escaping gas while working in silo.

Safety Committeeman's Quick Action Revives Employee Overcome by Gas

LINCOLN AFB—Quick thinking and prompt action by a General Dynamics/Astronautics employee here has been credited with saving the life of a contractor employee working on Atlas launch facilities.

Recognized is Don Chandler of Astro's Dept. 616-4.

Bob Reedy, an employee of Paul Hardeman Co. at Atlas Site 10, was hooking up a line in the silo LO2 system at the seventh level. He was overcome by dry nitrogen, a heavy gas difficult to detect if leaking, being used on that level.

Chandler, an Astro safety committeeman, recognized Reedy's symptoms and helped rush him to ground level where Chandler administered oxyen from a portable inhaler for 20 minutes.

A quality control inspector, Chandler is one of hundreds of Astro employees in the field who have received specialized training in safety through workman's safety committee program.

Kennedy Named On DOD-Industry Manual Study

Howard R. Kennedy, chief of service publications at General Dynamics/Convair, has been appointed to serve as a member of the newly-formed Department of Defense Industry Committee for Technical Manuals.



Howard Kennedy

Kennedy will represent the entire aircraft industry on the eight-man Industry Advisory Committee formed to assist the Department of Defense in standardization of specifications used in preparation of military technical manuals. Other members represent Western Electric Co., American Visuals Co., Garrett Corp., Commonwealth Edison Co., Chrysler Corp., Clark Equipment Co., and Martin Co.

In 1958, as chairman of the Aerospace Industries Association Publications Committee, Kennedy spearheaded a project to completely overhaul the hundreds of specifications covering technical manual preparation. At that time he urged a "grass roots" approach because of spiraling technical manual costs caused in great part by ever-increasing number of military manual specifications issued by different branches of the military services.

"By standardizing basic manual specifications, the multitude of different-type specifications can be eliminated entirely," Kennedy pointed out. "One set of specifications can take care of manuals for operation and maintenance of weapons and weapon systems used by all branches of the services."

Formation of the Department of Defense joint military-industry team is a direct result of the AIA proposal. Goals of the team will be to reduce number of specifications governing preparation of technical manuals; to develop policies for most economical manual preparation; to simplify and improve understandability, completeness, and accuracy; and to provide for early preparation and availability of interim-type manuals used during initial service tests and training of maintenance and operational personnel.

"Potential savings attained through standardization is conservatively estimated to run into the millions of dollars," said Kennedy. "When our final objectives are achieved, over a period of years, not only a great amount of money will be saved but more efficient instructions for operation, maintenance and repair of the more complex weapons systems of the future will be provided."

SAFETY ENGINEERS ELECT VAL DEZ

M. C. Val Dez, chief safety engineer for General Dynamics/Convair, has been elected a "member at large" of the American Society of Safety Engineers, Los Angeles Chapter. He was installed last week in Los Angeles.

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SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. — ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.

Swissair Teams Train In 880-M and 990 Jets

Teams of key Swissair maintenance personnel and overhaul specialists are learning the fine points of Convair jet transports under a special training program in progress at General Dynamics/Convair.

Approximately 70 Swissair experts will be at the San Diego plant before delivery of the first Convair 880-M to Swissair next month. Divided into groups of six to eight they will all have opportunity to study the most minute details of the 880-M and 990 jetliners under guidance of Convair and Swissair instructors.

Many of the maintenance men from the Swiss airline have received basic ground school training in Convair customer service maintenance courses during the last year. Present instruction has been arranged to assist them in developing their own training program and to give them latest information in specific areas.

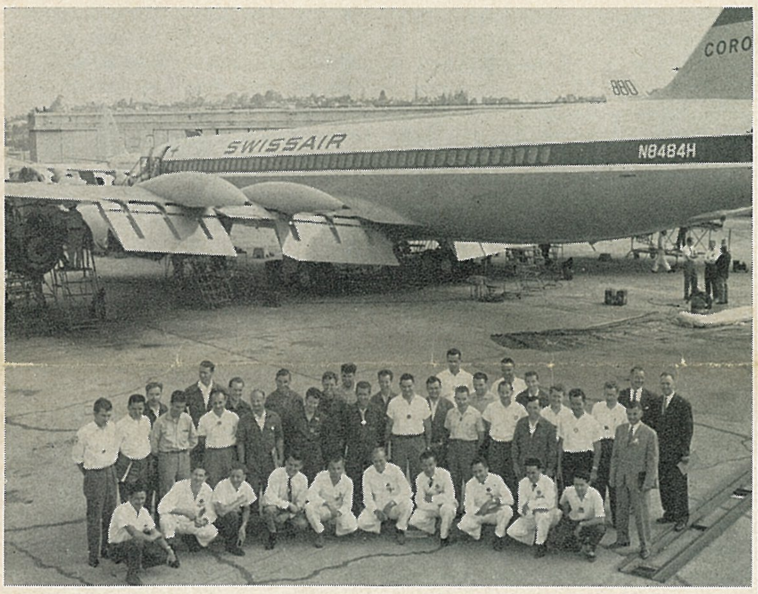
Arranged especially for Swissair were two formal sessions in customer service maintenance training. Fifteen attended a one-day class on landing gear rigging procedures July 7 and will have sessions next week on flight controls and engine rigging.

Max Bachmann, assistant technical representative for Swissair at GD/Convair, and H. R. Minder, manager of Swissair training at San Diego, are coordinating the present program. Both are assigned to the staff of H. P. Schulthess, resident representative at GD/Convair for Swissair-SAS.

The two 880-Ms slated for Swissair will go first to Arlanda, Sweden, for flight crew training and then into service over Swissair's Far East route between Zurich and Tokyo. Convair 990 Coronados will be used over Swissair and SAS European routes and connecting flights to South America, Africa, and the Near East.



FIRST OF FIVE—Colorful ceremonies were staged last tweek when Japan Air Lines accepted first of five 880-M jetliners it has on order. Receiving congratulations from GD/Convair President R. C. Loomis is Tetsuo Oba, director of JAL operations department. Plane was christened "Sakura" (cherry blossom) with several Japanese boys and girls participating in ceremony.



SWISSAIR'S OWN—First Convair 990 being readied for Swissair serves as impressive background for Swissair key maintenance and overhaul personnel at San Diego plant for training. At far right are C. J. Dutton, GD/Convair contract administrator; Max Bachmann, Swissair assistant technical representative at Convair; and H. R. Minder, manager of Swissair training at San Diego.

Shannon Takes Over Flight Test As Prophett Shifted to Astro

E. D. "Sam" Shannon, engineering staff specialist at General Dynamics/Convair, has been named to succeed P. M. "Phil" Prophett who has been assistant chief engineer—flight test.

The announcement was made late last week by E. R. Peterson, GD/Convair vice president—research and engineering.

Prophett is joining GD/Astronautics as manager of base activation.

Shannon, first man in the world to fly a delta wing airplane, was chief of engineering flight test at GD/Convair before taking on duties of engineering staff specialist.

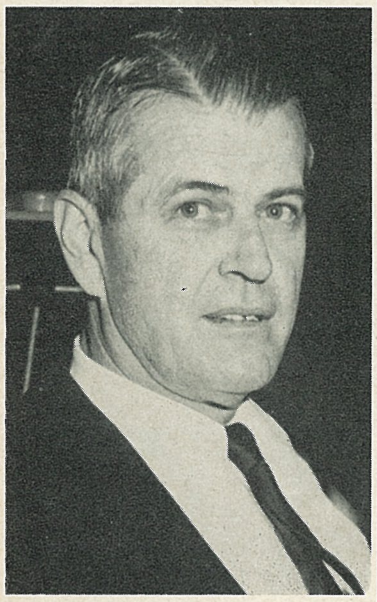
Since joining GD/Convair in 1943, Shannon has test or service flown almost every type of aircraft.

In 1948 he was the first to fly the XF-92A, research version of the F-102A interceptor. In April, 1953, he became the first to fly a water-based delta wing plane, the Sea Dart.

Shannon's log also includes the XP4Y-1 flying boat, XB-24K single-fin Liberator bomber, the XPB2Y-1 Coronado flying boat, XB-32 heavy bomber, PBY-5A and 6A Catalina amphibians, XL-13 liaison plane, Spratt Controllable Wing, Convair-Liner 240 transport, XP-81 experimental turboprop fighter, XB-36 six-engine intercontinental bomber, T-29 "flying classroom," and the XB-46.

Before starting his aviation career, Shannon studied civil engineering at Alabama Polytechnic Institute. He joined the Army Air Corps as an aviation

(Continued on Page 2)



SAM SHANNON — Reins of flight test at Convair pass from P. M. Prophett to E. D. Shannon. Latter is former test pilot and one of company's most distinguished airmen.

Pedestals, Yet!

'Kneeling' 990s Moving Along Assembly Line

Giant General Dynamics/Convair 990 jet transports are being figuratively "lowered to their knees" as they move down Bldgs. 2 and 3 final assembly line.

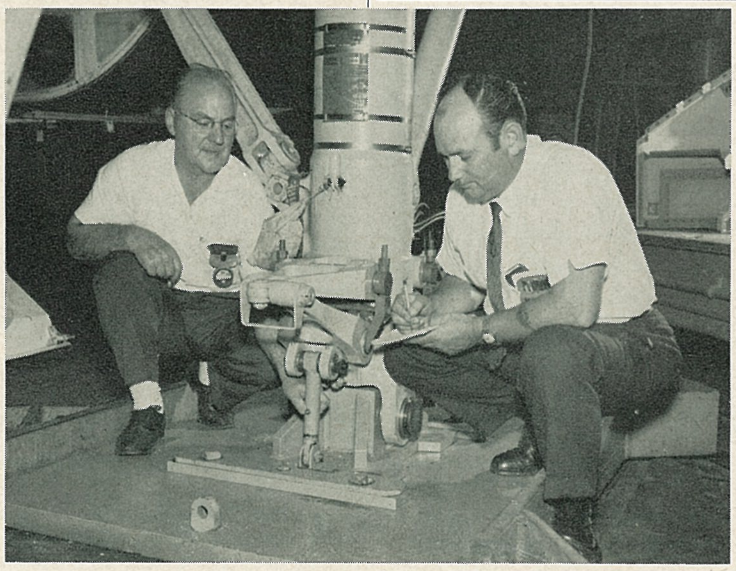
Landing gear "pedestals" have proved the solution to a perplexing problem which threatened the smooth flow of 990 jetliners between and after the 880 and 880-M versions.

When an airplane reaches the major mate station on the final assembly line it is supported on its main landing gear and moved by means of a "skate" under the gear. (Because of its great length, the 990 goes down the assembly line on a 34-degree angle. Thus it cannot be moved on its main gear. Instead, it is moved by pulling the "skate," upon which the landing gear is positioned, down the track.)

A problem arose because the main landing gear on the 990 causes the airplane to stand some 18 inches higher than the 880.

"If we sent the 990 down the final assembly line on its main landing gear it meant that we would have to make new manufacturing aids or make the 880 working stands and platforms dual-purpose to fit the new

(Continued on Page 2)



LOWERED—R. E. Dennington (right), plant engineer, and engineer W. B. Headland inspect pedestal on 990 in final assembly. Pedestal replaces main landing gear, for all practical purposes makes 990 same height as 880, thus saves expense of making dual-purpose manufacturing aids. Dennington conceived pedestal idea; Headland designed it.

880-M Christened 'Cherry Blossom'

Japan Air Lines last week became the third customer to accept an 880-M jet transport.

Colorful ceremonies marked the occasion as R. C. Loomis, General Dynamics/Convair president, gave delivery papers to Capt. Yasuji Goto, assistant general manager of JAL's flight crew department.

The first of five 880-Ms ordered by JAL, the plane was christened "Sakura" (cherry blossom) by Tetsuo Oba, managing director of operations for the Japanese flag carrier, and Miss Chigako Greer. Each poured a dipper of water from Mount Fuji over the nose.

The jetliner is now being used for pilot training before being flown to Japan.

Convair 880-Ms have already been accepted by Civil Air Transport, flag carrier of the Republic of China, and Viasa of Venezuela.

JAL is scheduled to take delivery of two more 880-Ms—christened "Matsu" (pine) and "Kaede" (maple) during coming weeks. Two other 880-Ms are slated for delivery to the airline in May, 1962.

Interior decor is authentically Japanese. Pine bough brocade was used on seats and carpeting pattern resembles raked sands of classic Japanese dry gardens. Traditional crests appear on the valance, and a pale gold and white chrysanthemum pattern is used on curtains over doorways.

The airline will introduce the 880-M on its Southeast Asia routes between Tokyo, Hong Kong, Bangkok and Singapore. Sometime in 1962 the present Southeast Asia route will be extended to Europe via India, Egypt and Rome.

Purchase of the first three JAL planes is being financed in part by the Export-Import Bank of Washington, a U.S. Government Agency.

Type Certification Meeting Scheduled

Final phase of flight testing and function and reliability program for the General Dynamics/Convair 880-M jetliner is scheduled for completion this week.

It will be followed by a Federal Aviation Agency meeting for type certification of the 880-M, said T. W. Sanford, FAA coordinator for GD/Convair.

FAA Men Complete Course in 880-M

Thirty-five Federal Aviation Agency men will complete a five-week maintenance course on the Convair 880-M this week at General Dynamics/Convair.

They have been at the San Diego plant since June 19 attending customer service maintenance classes on the Convair jet transport systems. Other FAA personnel were at GD/Convair for two planners programs conducted since the first of the year and others have attended courses for airline customers.

Con-Trib Gifts Voted To Three Agencies

Three Southern California organizations received donations from General Dynamics/Convair Employees' Con-Trib-Club after committee approval at the last meeting.

Crippled Children's Society of Los Angeles was voted $250; Diabetes Association of Southern California, Inc., $190; and Girl Scout Council of San Diego County, Inc., $1,000.



150 YEARS—That imposing figure represents total years accumulated by these six Convair men, latest to receive 25-year service emblems. From left in panel, A. B. Oberg, Dept. 31; J. A. Bender, Dept. 25-9; E. J. Sieck, W. R. Atkinson, C. S. Wills, L. E. Weber, all Dept. 400-1.

Log Book Entries

Service Emblems

CONVAIR

Service emblems due during the period July 16 through July 31.

Twenty-year: Dept. 6, E. E. Benson Jr., R. J. Loesch, R. E. Lowry, P. A. Nagy, S. E. Nowry; Dept. 21-1, C. E. Hendricks; Dept. 25-1, Odell Browning, J. L. Channell, Nelson Thompson; Dept. 31, L. K. Lee, Obed Ray Jr., F. E. Reed; Dept. 44, John Cicalo, George Davidson Jr.; Dept. 46, Clarence White.

Dept. 91-8, A. J. Krumweide; Dept. 146, A. N. Williams; Dept. 188-4, D. S. Arnott; Dept. 190-6, Michael Delva; Dept. 192-4, R. L. Ingraham; Dept. 197-8, M. E. Thomas Jr.; Dept. 215, Stanley Brown; Dept. 400, C. L. Seybold, G. E. Williams; Dept. 401, H. W. Riley, J. A. Ross, J. I. Sather, A. L. Simpson.

Fifteen-year: Dept. 6-40, D. P. Germeraad; Dept. 15-6, R. L. Dumas; Dept. 25, L. L. Sellers, H. A. Smith; Dept. 31, W. C. Agner; Dept. 136, N. A. Mosley; Dept. 142, J. N. Prescott; Dept. 160, M. D. McElvain; Dept. 188-6, O. A. Bonnema; Dept. 197-8, G. G. Webber; Dept. 216, E. A. Cox; Dept. 258, J. H. Beseler; Dept. 343-7, S. E. J. Corder.

Ten-year: Dept. 3-1, C. M. Hamel, D. W. Sykes, W. W. Sweeting; Dept. 6, J. R. Bain, R. M. Cash, R. L. Cusick, Dominic De Crescenzo, W. G. Messer, Bart Tricoli; Dept. 8-4, R. F. Shane; Dept. 14, Harry Lesser, Ruth B. Smith; Dept. 15, Marcella F. Bailey, Virginia L. Parker, Nathan Schiller; Dept. 25, J. L. Totedo, Fannie C. Williams.

Dept. 31, A. E. Bittner, Willie E. Eddington, T. C. Groby, R. J. Hartman, E. B. Reiber, C. L. Tindol; Dept. 45-0, W. C. Dallman; Dept. 95-0, R. R. Bullock; Dept. 97-7, Dorothy G. Evans; Dept. 102, David Cooper; Dept. 115, R. L. Harr, Florence E. Stoike; Dept. 116, Ruth L. Mawhinney; Dept. 128, Oleather S. Hawthorne, Lucy M. Stangler; Dept. 129-0, R. C. Berg.

Dept. 133, L. Q. Christianson; Dept. 139, Mildred J. Muller, L. N. Trujillo; Dept. 142, W. E. Elmquist; Dept. 145, R. E. Hale; Dept. 146, Josefina S. Castaneda; Dept. 148, W. A. Aston, P. G. Nance, J. F. Wright; Dept. 160, Levon Anderson, H. J. Arberry, A. B. Sevier; Dept. 206, L. D. Sires; Dept. 215, R. R. Nelsen, L. W. Tracy; Dept. 216, Marian E. Gates, Mary K. Kidd; Dept. 218, Mary G. Labastida; Dept. 223, Frank Mendez; Dept. 271, E. T. Rhoads; Dept. 292-1, T. E. Jensen, Anna M. Rollo; Dept. 400, C. R. Adams Jr., K. J. Sharp, M. E. Wilson; Dept. 401, Sally J. Paolini, C. T. Tyree, R. C. Vones.

Retirements

CONVAIR

ALFORD—Loren A., Dept. 141. Seniority date Dec. 10, 1953, retirement effective April 24, 1961.

BEADLE—John J., Dept. 120. Seniority date Sept. 4, 1947, retirement effective June 30, 1961.

DENNY—Leo V., Dept. 149. Seniority date Sept. 18, 1944, retirement effective June 30, 1961.

HANE—Nils E., Dept. 14-4. Seniority date March 17, 1952, retirement effective July 7, 1961.

HAYDEN—Lucille M., Dept. 91. Seniority date Oct. 6, 1943, retirement effective June 30, 1961.

HOFF—Conrad P., Dept. 62-1. Seniority date Oct. 27, 1941, retirement effective June 30, 1961.

KLEIN—Albert E., Dept. 188-1. Seniority date Oct. 26, 1942, retirement effective June 30, 1961.

LINDSAY—Robert F., Dept. 218. Seniority date Dec. 14, 1951, retirement effective July 6, 1961.

LUTNICK—Anthony H., Dept. 288. Seniority date Jan. 3, 1956, retirement effective June 19, 1961.

NEWELL—John C., Dept. 223. Seniority date Sept. 8, 1955, retirement effective July 7, 1961.

WILSON—Sam O., Dept. 218. Seniority date Jan. 15, 1961, retirement effective June 30, 1961.

Promotions

CONVAIR

Promotions to or within supervision effective July 3.

Dept. 4-1, Material Office & Administration: To material services asst. supervisor, J. Grimsley.

Dept. 95-0, Estimating: To estimating supervisor, R. R. Bullock.

Dept. 138, Jet Transport Forward Fuselage Primary: To asst. foreman, W. E. Carriker.

Dept. 188, Inspection, Plant 1: To inspection supervisor, D. B. Seaburg. To inspection asst. supervisor, G. W. Overlin, H. C. Peters, L. P. Sabat, R. L. Schahn.

Dept. 192-4, Manufacturing Control, Plant 1: To M/C asst. foreman, E. E. Caldwell.

Dept. 197-3, Quality Control: To inspection asst. supervisor, E. L. Brown.

Dept. 288-2, Inspection, Plant 2: To inspection asst. supervisor, W. B. Dawson.

Dept. 343-1, Commercial Field Modifications-Dallas: To inspection asst. supervisor, M. C. Jorgensen.

Dept. 400-1, Tooling: To tooling supervisor, E. E. Buschbaum.

GD/ELECTRONICS

Dept. 1, General Manager's Office: To manager of operations, H. L. Gates.

Dept. 2, Controller: To manager of cost accounting, N. J. Barnes. To manager of systems & procedures, F. L. Farrell. To manager of general accounting, P. M. Jepson. To manager of bid analysis, R. H. McManus. To manager of budgets, D. L. Zimmerman.

Dept. 3, Quality Control: To quality control supervisor, B. M. Skrobiza.

Dept. 4, Marketing: To product manager, R. E. King, P. N. Migdal.

Dept. 5, Engineering: To manager of advanced engineering, W. A. Rabe. To chief of transmitter equipment, R. R. Apgar Jr. To chief of advanced systems, W. F. Briles. To chief of rec. & analysis equipment, R. S. Durnell. To chief of electronic design, S. Molnar. To chief of systems design and engineering test, R. F. Schillinger.

Dept. 6, Manufacturing: To manager of production engineering, J. P. Morris. To manager of manufacturing, J. H. Thompson. To general foreman, R. L. Higgins, L. F. Kruse. To foreman, R. L. Hurst, L. J. Moran, D. C. Newlon. To asst. foreman, W. J. Squance.

Dept. 8, Production Engineering: To assembly planning & methods supervisor, G. D. Patrick. To estimating and cost control supervisor, K. A. Seely.

Personals

CONVAIR

I deeply appreciate the expressions of sympathy extended by employees of Convair's Dept. 8 at the loss of my father-in-law.

C. Harold Hahn, Dept. 8-4.

* * *

We are most grateful to Convair friends for the beautiful flowers and messages of sympathy received when we lost our husband and father, Joseph E. Plausse, Dept. 25.

Mrs. Winifred Plausse (Dept. 400) and daughter.

* * *

We would like to acknowledge the many expressions of sympathy extended by fellow workers of John Diaz, Dept. 400-4. It has been a great consolation to us to learn that John had so many friends. Thank you all so very much.

Mr. and Mrs. H. C. Stidman.

Births

CONVAIR

HANSEN—Son, John Andrew, 6 lbs., 5 oz., born July 4 to Mr. and Mrs. Robert A. Hansen, Dept. 128.

POSEY—Son, David Charles, 6 lbs., 9 oz., born June 27 to Mr. and Mrs. Charles D. Posey, Dept. 192.

SPERRY—Son, David Thomas, 8 lbs., 8 oz., born May 20 to Mr. and Mrs. Jesse M. Sperry, Dept. 102.

GD/ELECTRONICS

DAIBER—Daughter, Theresa JoAnn, born June 17 to Mr. and Mrs. William Daiber, Dept. 6.

Deaths

CONVAIR

DIXON—C. Horace, Dept. 31. Died July 6. Survived by wife.

ELRICK—Harry G., Dept. 102. Died July 7. Survived by daughter and sister.

FREEMAN—Thomas D., Dept. 133. Died July 3. Survived by wife, son, two brothers, one sister.

WARDRIP—Jack E., Dept. 318-3. Died July 9. Survived by wife.

NMA Area Council Election Scheduled

New National Management Association Area Council officers will be elected at a meeting July 26.

General Dynamics/Astronautics and General Dynamics/Convair Management Clubs are among the seven member clubs which compose the local Area Council.

★ Convairiety ★

Founded Sept. 1, 1948. Published in six editions (Fort Worth-Daingerfield, Convair (Palmdale-Holloman), Astronautics, Astronautics Off-Site, Pomona and the Mail). Logan Jenkins, editor-in-chief.

Approximate current total circulation, over 70,000. News items and letters to the editor are solicited, but no advertising can be accepted.

SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Fred Bettinger, news editor; Grayce Fath, Helen Pemberton.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, GD/Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.

Pedestals, Yet!

'Kneeling' 990s Moving Along Assembly Line

(Continued from Page 1)

height," said R. E. Dennington, plant engineer.

Instead of tackling the problem from the angle of making all the manufacturing aids dual-purpose for 880 and 990, Dennington suggested that the 990 be lowered to the same height as the 880 by removing the main landing gear.

The first 990 with a pedestal replacing the main landing gear is now going down the line. The bogey beam which supports the large tire units has been pulled, and a retainer inserted, upon which the giant aircraft rests in an "on its knees" fashion. For all practical purposes the 990 moves down the line now at the same height as the 880.

Six of the pedestal sets, which were designed by engineer W. B. Headland, have been manufactured by plant engineering department.

Because the airplane has a tendency to rock somewhat during line moves, the pedestal includes simple "shock absorbers." They are forcibly-filled with lengths of drop-hammer rubber which absorb any rocking motion.

The pedestal is removed and the main landing gear installed at the last station in final assembly before painting.

Dennington has submitted the methods improvement idea as a Cost Improvement Proposal but exact dollar savings are not yet available, though they are expected to be great.

The pedestal idea has obvious advantages such as elimination of additional manufacturing aids and equipment, it improves housekeeping because less equipment is required, saves manhours to switch equipment during line moves, eliminates safety risks, etc.

An important side benefit realized with the pedestal is that it is no longer necessary to put the nose landing gear gimbal dolly under the nose. This dolly permits the plane to tilt down at the tail and prevents the vertical stabilizer from scraping the roof of the assembly buildings.

Space Travel Engine Research Approved

A research contract in the amount of $68,781 has been awarded General Dynamics/Convair by National Aeronautics and Space Administration.

Dr. A. E. S. Green, chief of physics for GD/Convair, said that the year-long study program will be devoted to basic research necessary in development of ion propulsion engines for space travel.

Heading the experimental project is Dr. G. D. Magnuson.

Larry Lawson Guest Of North Island Club

L. G. Lawson (Dept. 188), past president of General Dynamics/Convair Management Club, was guest speaker at a recent meeting of the North Island Management Club, a group composed of both military and civilian personnel. Lawson discussed "Program Material in the Management Field," recommending topics and speakers for club meetings.

Customer Men Fan to Far Points Of Globe to Await Jet Arrivals

New assignments are taking General Dynamics/Convair customer service personnel to all parts of the world as Convair 880-M jetliners begin moving out of the San Diego plant.

At least 10 field service experts will be in new locations in support of 880-Ms by the end of this month, said L. J. Bordelon, chief of transport service.

Court Zeiss has been recalled from his most recent post at Chicago, Ill., with TWA and Delta Airlines, to go to Tokyo with Japan Air Lines. He joins Jerry Dugan already stationed at the Japanese airline port.

Frank Laffoon left the end of June for Zurich, Switzerland, to set up operations for Swissair's first 880-M. He will be joined the last of this month by Ed Buckman and Mark Addis.

John Nowak left San Diego this week northbound for Seattle, headquarters of Alaska Airlines. Earl Makela is now with Henry Bohmbach at Kansas City with Trans World Airlines.

George Pohlman and Ralph Avila went to Caracas, Venezuela, last month where they will support 880-Ms going to Viasa; and Vic Korski and Harry Addis are now at Taipei, Formosa, where they joined Phil Smith at Civil Air Transport headquarters.

Shannon Takes Over Flight Test Reins

(Continued from Page 1)

cadet in October 1929.

In 1932, Shannon went to China as a member of the United States mission to instruct Chinese pilots. Three years later he joined the Glenn L. Martin Co. in Baltimore as a test pilot.

Prophett joined GD/Convair in 1942 as a test pilot. The XC-99, B-36 and Convair-Liners were among planes he flew. Prophett served as flight captain for a number of years and in 1951 was named manager of flight. Two years later he headed F-102 flight operations as manager and was appointed chief of engineering flight test in 1955.

Prophett's new appointment was announced by GD/Astro President J. R. Dempsey. He replaces A. P. Higgins who has left the company.

Atlas Scores 'Double' Success With Midas and 9,000-mi. Shot

Two Atlas missiles, launched within six days from opposite coasts, put on spectacular performances recently, one as a "solo," the other as part of a "double."

On July 6, Atlas 22-E blasted off from Complex 13 at Cape Canaveral, Fla., and dropped its instrument-loaded re-entry vehicle (nose cone) 9,054 miles downrange. It was the longest surface-to-surface missile flight ever recorded.

Six days later from the Point Arguello (California) Launch Complex 1, Atlas 97-D and an Agena B vehicle combined to place Midas III into a polar (near circular) orbit 1,850 miles above the earth. It became the heaviest U. S. satellite ever boosted into high-altitude orbit.

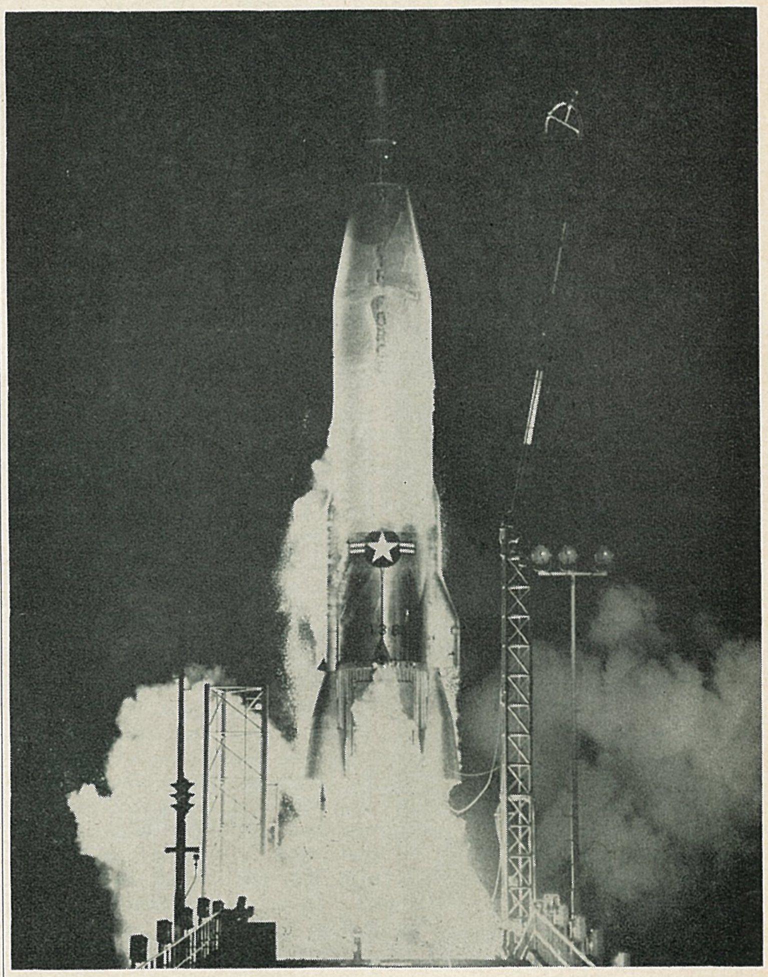
Jack Moline, test conductor, and John Hughes, assistant test conductor, headed the General Dynamics/Astronautics launch crew at Cape Canaveral. The 150-minute countdown was performed with all missile systems "OK." Impact, witnessed by two planes and a surface ship, was "on target" some 1,000 miles southeast of Capetown, South Africa, in the Indian Ocean.

Missile 22-E was the first of the "E" series Atlas "birds" to fly over the extended range and surpassed by a few miles similar flights in May and September last year by Atlas 56-D and 79-D, both of which flew over 9,000 miles.

Richard A. Clark was test conductor for GD/Astronautics personnel at Point Arguello who teamed with members of the Air Force's 6565th Test Wing in successfully launching Midas III from Vandenberg AFB. Midas III (for Missile Defense Alarm System) is equipped with infra-red sensors capable of detecting ballistic missile rocket exhausts shortly after launch.

Midas III is a 3,500-pound spacecraft some 30 feet in length.

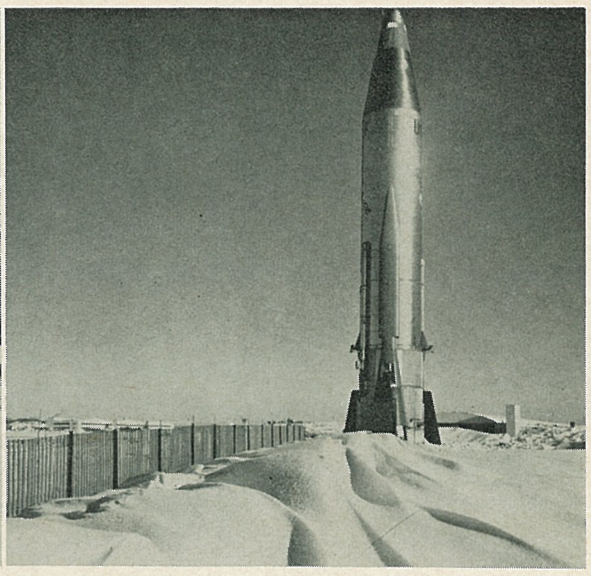
Atlas 97-D, used in the launch, was configured specially for the Midas space program, differing only in minor details from standard "D" series missiles. During airframe manufacture at San Diego, heavier stainless steel was used in the upper portion of the liquid oxygen tank to accommodate increased loads imposed by the heavier Agena B stage.



LONG, LONG TRIP—Atlas 22-E clears launcher at Complex 13 at 11:51 p.m. July 6, en route to 9,054-mile flight. Cape Canaveral launch was longest surface-to-surface flight ever recorded and outdistanced two other Atlas flights of over 9,000 miles.







FEEL COOLER NOW?—When summer sun beats down it's refreshing to remember wintry days at GD/Astro's off-site bases. At top left is well-balanced photo shot by Tom Mahnken at Warren AFB last winter, with snow fence and "bird" at ready. At right is Offutt AFB display missile before SAC headquarters on day of snow. Center is Ted Winfield, main Astro plant photographer on assignment to Warren in mid-winter. Note icicles on car.

You Name the Weather, Astro Bases Have it!

All General Dynamics Corporation Divisions have weather, but GD/Astronautics lays claim to having the "most."

Queried last week, GD/Astro test and operational bases filed weather reports for a single day.

Highest reading, 112 degrees, was at Edwards Rocket Site in the Mojave Desert. (Chris Marques added that at one level of a test stand where work was in progress the reading was 121 degrees!)

The lowest overnight reading for the date was Vandenberg AFB with a 51, while Warren AFB and Forbes AFB had 53s.

Ironically the lowest ERS reading, 76, exceeded the maximum, 67, at Plattsburgh AFB where the minimum was 54. Vandenberg AFB's 64-51 was lowest of all.

Ranged between these extremes, with surprisingly small variations, were the others. With maximum-minimum temperatures shown, they were: Fairchild AFB, 90-56; AFMTC, Cape Canaveral, 89-73; Schilling AFB, 88-54; Altus AFB, 87-66; Walker AFB, 87-58; Warren AFB, 84-53; Forbes AFB, 83-53 and Lincoln AFB, 81-61.

For the most part, the reports indicate unusually dry weather for most of this year. However, in just four days in early June more than four inches of rain fell at Altus AFB. And Warren AFB experienced an unseasonable 11½-inch snow storm in mid-May!

Severe weather conditions were mentioned in three reports. Phil Brown at AFMTC pointed out this is the season for off-shore hurricanes along the Florida coast. Bob Griffin at Altus AFB said his base had shared in tornado alerts in that area through June. Alice Watters at Warren AFB quotes Cheyenne weather authorities as saying many tornado-type clouds prevail during this season. "This is supposed to be the 'breeding ground' for tornadoes that move out into Kansas," Alice said. "But we don't do it on purpose!"

Among those reporting were a few "salesmen" for their respective areas. Dale Fields at Fairchild AFB boasts most people there sleep under a blanket, even in the summer. And civic pride prohibits natives from catering to air conditioning. "We don't have weather here, only a moderate climate," Fields reported. Rod Bricker of Walker AFB laid claim to the best humidity anywhere, especially in the southwest.

In a lighter vein, Griffin of Altus says natives there loudly proclaim there is no "typical" weather. "They say, if you wait a few minutes. It will change!"

San Diego, on the day in question, had a high of 74 degrees and a low of 63. Sycamore Canyon Test Site, just five airline miles away, had a high of 95 and a low of 69.

SENIOR PHYSICISTS JOIN GD/FW STAFF IN APPLIED SCIENCE

Addition of two senior physicists to the applied research group at General Dynamics/Fort Worth has been announced by Dr. E. L. Secrest, chief of applied research.

They are Dr. Robert B. Graf and Dr. Harold G. Hedrick, both of whom work in GD/FW's applied science program.

Dr. Graf obtained both a bachelor's and master's degree from Washington University, and a Ph.D. degree in mineralogy from University of Illinois. He served in the U. S. Navy from 1948 to 1952.

Dr. Hedrick holds a bachelor's degree from Centre College of Kentucky, a master's degree in biological sciences from Marshall College, W. Va., and a Ph.D. in plant pathology and microbiology from West Virginia University. He served in the U. S. Navy from 1943 to 1946.

Four-Foot 'Space Ball' Simulates Altitudes

A huge transparent ball is allowing research engineers in General Dynamics/Convair antenna and radome group to test antennas as if they were far out in space.

Assembled at GD/Convair, the "space chamber," four feet in diameter and made of ¾-inch-thick plexiglass, provides a free-space environment to prove power-handling capability of antennas at various altitudes. Although completely enclosed within the sphere, the antenna will radiate as normally as if actually installed on an aircraft, missile, or space craft, explained M. M. Chazotte, in charge of antenna and radome studies at GD/Convair. A normal environment is impossible to simulate in ordinary enclosed metallic altitude chambers, he said.

Altitudes from sea level to as high as 300,000 feet can be produced with present equipment. Inside air is pumped out in stages to obtain different levels of evacuation and, thereby, simulate different altitudes until outer space environment is reached. By means of meters which measure internal pressure and such data as altitude, power transmitted, and power reflected, it is possible to monitor operation of the antenna.

In recent tests an antenna, designed to operate at 40 watts and 41,000 feet altitude for the Convair 880/990 jet transports, was operated at 125,000 feet with a power input of 85 watts. Purpose of the high-altitude test was to see if this antenna would be applicable for use as an antenna array element in a high power-steerable beam long-range antenna for intercontinental airborne communications systems.

According to Chazotte, other studies will include research in corona breakdown—corona is the visible glow from electrical discharge at point of breakdown within antenna.

"High altitude requirements impose serious antenna design problems due to tendency of antennas to go into corona (or voltage breakdown) when transmitting only fractions of the power that is transmitted at sea level," he explained.

Future tests also will verify designs of antennas to be used in high-altitude and high-power conditions on aerospace vehicles.

TECH REP PRAISED BY 5TH AF HDQ.

A Convair technical representative, Tom Saint Sing, has received the first letter of commendation awarded in five years to any technical representative by 5th Air Force Headquarters.

Saint Sing (Dept. 15-5) returned to San Diego the end of June after more than two years at Japan bases in support of Convair F-102s. Assigned to the Far East field under Rudy Haas, Convair field service area supervisor, he had divided his time between the 4th FIS at Misawa, 68th FIS, Itazuki, and 40th FIS, Yokota.

Col. R. D. Brown, 5th AF director of maintenance and engineering, praised Saint Sing's service: "This is to express my sincere appreciation for the exceptionally fine manner in which you have performed your duties during your assignment with this command."

F-106 Probes Tornadoes In Storm Cloud Study

A Convair-built jet interceptor has been one of a small fleet of aircraft braving the elements to bring back data which may some day point the way to control, or even dissolve, ravaging tornadoes of the Middle West.

Based at Tinker Air Force Base in Oklahoma an F-106 lined up alongside planes of all types assigned to investigation of tornado conditions and probing of storm clouds in the tornado belt, according to a recent Sunday supplement of the Daily Oklahoman. Other planes recording meteorological phenomena that causes tornadoes were DC-6Bs, B-57, B-66s, B-47, C-130, B-26, and U-2. Control headquarters were in the Oklahoma Air National Guard hangar at Will Rogers Field.

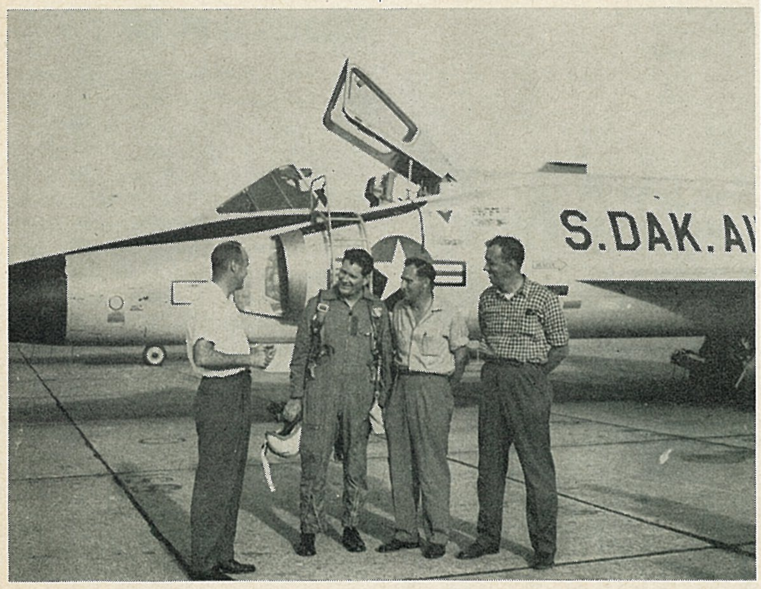
They were directed by a group of men called "Rough Riders" brought together for the weather research project from the U. S. Weather Bureau, U. S. Air Force Cambridge Research Laboratory, AF Aeronautical Systems Division, and Federal Aviation Agency. FAA air traffic controllers guided the planes in and around storm clouds on the safest route by radar. This year's project was concentrated on a 200-mile radius around Oklahoma City.

All planes, heavily instrumented for particular missions, brought back comprehensive data in the form of pictures—black and white, and color—magnetic tapes, graphs, charts for future study by scientists. The F-106 was equipped with two small vanes of balsa wood attached to its nose probe. These were connected to inside instruments which recorded pitch, yaw, and roll of the plane in high turbulent winds.

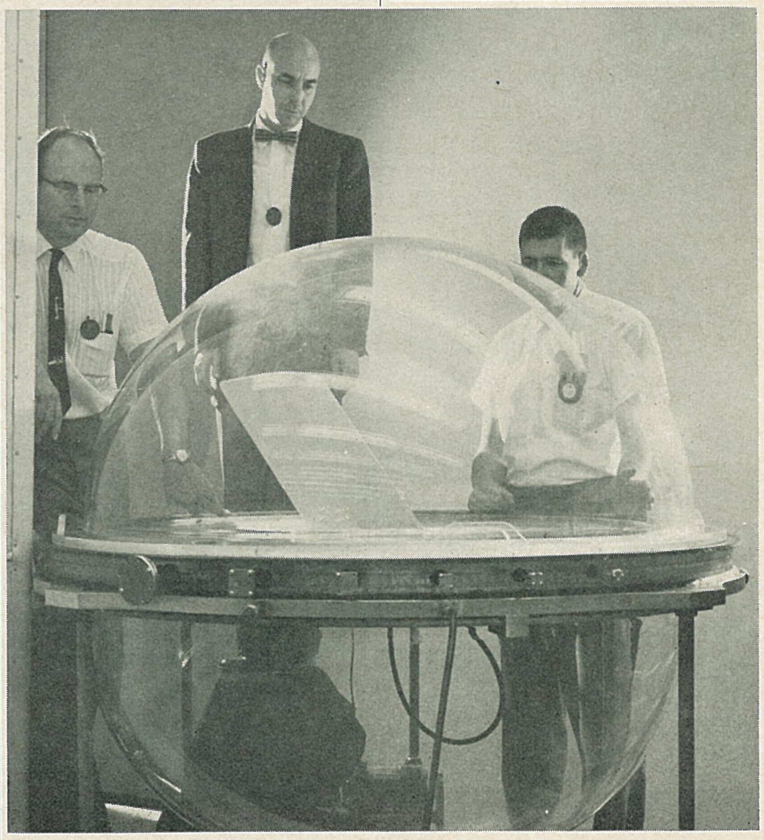
A. C. Snyder, Convair field service representative at Wright-Patterson AFB, home of the F-106A used in the thunderstorm penetration, reported that the Convair jet interceptor had no engine problems whatsoever in its rough duty. The pilot was quoted as saying, "The engine just sat there and chewed up whatever was thrown at it without ever missing a beat—and sometimes the precipitation was so thick I felt as though I were swimming!"

A total of 18 penetrations were made at altitudes from 15,000 to 40,000 feet. Mach range was from .83 to 1.63.

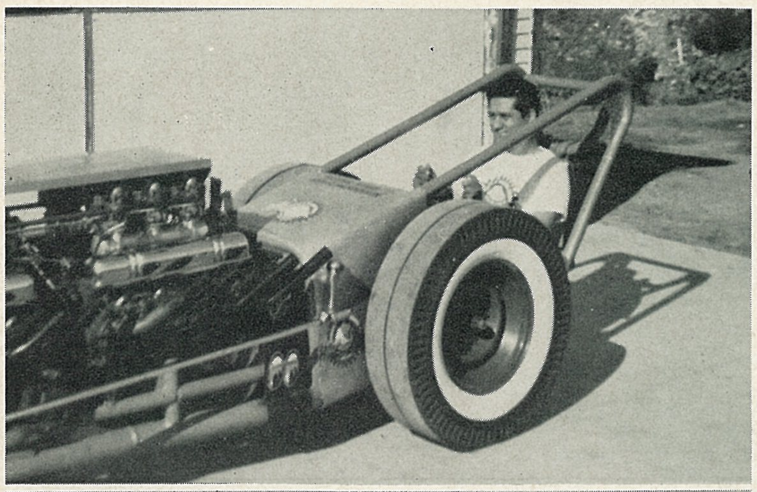
Already, according to the published report, lives have been saved by the Rough Riders. Their advance reports of forming tornadoes and forecasts of path direction have alerted populations in danger zones. In time to come, it is hoped that the severe storm study will serve as foundation for better warnings, and, possibly, a method of weather control.

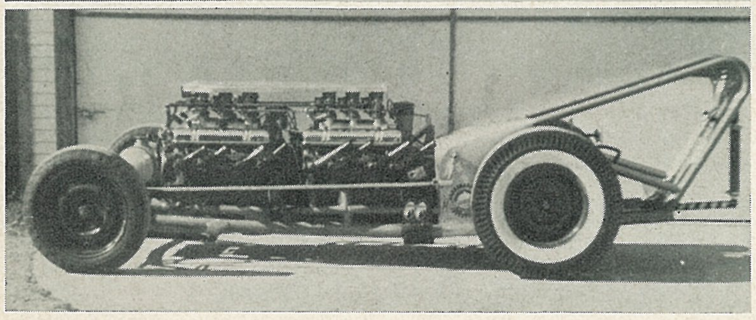


"GREAT PLANE"—Brig. Gen. Joseph Foss, chief of staff South Dakota Air Guard (second from left), praises F-102 performance after checkout at Foss Field, Sioux Falls, S. D. From left are Maj. Justin Berger, 175th FIS commander; Gen. Foss; and Convair reps, C. I. Callison and A. E. Gaull.



BIG BUBBLE—Crystal-ball gazing (from left) are Milton Chazotte, W. E. Moore, and C. J. Meierbachtol, all of GD/Convair antenna and radome group, as they watch antenna specimen under test in new plexiglass space chamber.





"IN THE SLING"—GD/Convair's George Vinas is shown in "cockpit" of his new dragster, which he expects to hit 170 mph. Note two V8 engines, mounted in tandem.

"Twin Slingshot"

Dragster Boasts No Radiator, 12 Carburetors, Two Engines

When George Vinas of General Dynamics/Convair goes for a Sunday drive he hits 150 mph and nobody gives him a ticket.

Vinas, who builds and races dragsters for a hobby, hopes to get his newest model up to 170 mph any day now.

His current machine is the fourth he has built from scratch and is still in the "debugging" stage, but the Dept. 137 man expects great things from it.

"I've put all the experience I gained while making the other models into this one," says Vinas.

Vinas' latest creation is called a "Twin Buick Slingshot,"—so named because it is powered by two Buick V-8 engines mounted in tandem and because the driver sits behind the rear wheels protected by swept-wing roll bars, looking for all the world like a candidate for the next man-in-space shot.

Almost two years of planning and spare-time work have gone into the current machine. Vinas mounted the frame himself, fashioned the manifold, headers (exhaust pipes), designed the roll-bar seating arrangement for safety.

Other pertinent features of the dragster include 12 carburetors, rear brakes only, no first or second gears, no radiator, starter or generator.

All in all Vinas has invested nearly $1,000 in the dragster. He estimates it would have cost close to $3,000 if he had bought parts new.

Vinas, who has been making and racing dragsters for about nine years, sold his previous models for small profits.

Just to enjoy his hobby demands a considerable amount of effort on Vinas' part. At present there are no authorized drag-racing areas in San Diego and Vinas has to tow his dragster some 100 miles to the nearest strip.

On the road Vinas drives a '55 Ford. "It's completely stock. I haven't done a thing to it. Highway driving is too dangerous."

B-58 Pressure Test Re-Set

Pressurization tests on the B-58 escape capsule have been rescheduled for early fall at Carswell AFB.

The demonstrations will confirm a crew member's ability to close and pressurize the capsule after being subjected to sudden loss of air at high altitudes.

Phase 1 of the tests will simulate decompression to a maximum of 55,000 feet, and Phase 2 to 60,000 feet.

Air Force volunteers will man the capsule during a series of about 24 tests.

Dr. J. L. Judson, General Dynamics / Fort Worth aerospace medical specialist, will assist in selecting airmen for the demonstrations.

"Those chosen must pass a series of rigorous physical and psychological tests," Dr. Judson explained.

Hustler Cadet Unit Chartered

Hustler cadet squadron of Civil Air Patrol—named after GD/FW's famed Mach 2 bomber—was chartered in ceremonies at Carswell AFB July 11.

Col. Joe Stout, group VI CAP commander, presented the charter to M/Sgt. John M. Elkins, commander of the new unit.

Formed only a few months ago, the Hustler squadron already lists 42 members, 10 of whom are girls.

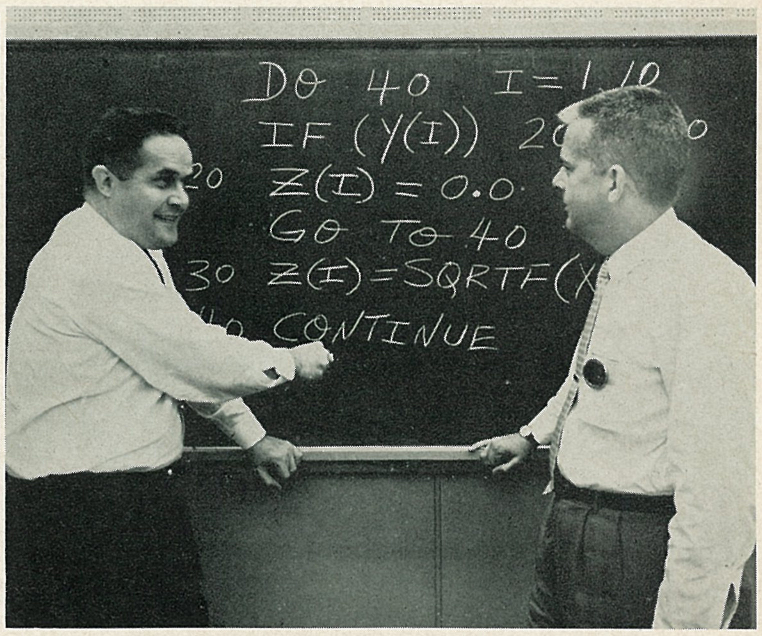
The unit is open to anyone between 14 and 18 years of age, and adults who wish to join as senior members.

"Our immediate goal is 50 cadets and 10 senior members," Sergeant Elkins said, "although we eventually expect to enroll considerably more youngsters."

Purpose of the unit is to give young people a general orientation in aviation, enabling them to make voluntary contributions as U. S. citizens through a number of projects later on.

Persons interested in joining the Hustler cadet squadron are urged to contact Sergeant Elkins (a first lieutenant in CAP) at PE 1-1422.

Malcolm Holloway of GD/FW's Dept. 2-5 attended the chartering ceremony.



MACHINE TALK—Jack Grigsby, left, is instructing many GD/FW engineers in FORTRAN, language used in "talking" to 704 computers. He's outlining problem to his supervisor, B. J. McWhorter.

GD/FW Engineers Attend Course In New Language For Computers

General Dynamics/Fort Worth engineers are learning the "language" of 704 computers in an effort to get speedier answers to relatively simple scientific problems.

Nearly 250 engineers in 20 classes have completed a 10-hour course in FORTRAN, a sort of IBM scientific shorthand which enables "laymen" to feed problems into computers.

Heretofore, all problems were fed into 704s by professional programers, employees who had spent many months learning basic computer language. The language consists mainly of letters, symbols and numbers.

"FORTRAN is a language closely resembling mathematics," said Jack Grigsby, senior aerosystems engineer in charge of FW's cooperative coding program. "Computers understand FORTRAN and can translate the language into problems which may be fed directly into the 704."

For example, the formula for finding the area of a triangle is written mathematically: A=½ bh. Writing this formula in basic machine language requires a number of detailed steps.

In FORTRAN, however, it could be written as: AREA = 0.5 * Base * Alt. The * mark indicates multiplication. The terms "Base" and "Alt," selected arbitrarily, are fed into the computer in setting up the problem to reserve a storage location for these qualities. When solving a problem, any set of numbers could be assigned to these "reserved" slots.

Using FORTRAN, GD/FW engineers will be able to feed many relatively simple and repetitive-type problems into the 704—and later the even more complex 7090 computers.

"FORTRAN has been used on IBM machines since about 1957," Grigsby explained.

"Other competitive companies have their own shorthand, though there is a movement afoot to provide an international language for use on any machine."



IMPROVED METHOD—William Bird, Dept. 344-2, GD/Astro, demonstrates viewing hood modification for calibrating oscilloscopes to Robert Mitchley, Dept. 344-2 foreman, left, and W. J. Cushman, general foreman, Dept. 344-3. Bird received $145 for idea submitted as Employee Suggestion.

Novel Idea (Simplicity Itself) Saves Time, Eliminates Safety Hazard, Earns $145 Award

Savings in manhours, and safer working conditions have resulted from an employee suggestion submitted at General Dynamics/Astronautics Plant 2 support center.

William Bird, calibration technician in support electronics (Dept. 344-2) devised a right-angle viewing hood to be used in calibrating oscilloscopes.

Previously, room lights had to be dimmed during calibration so the fast-moving trace on the scope face could be seen. To view the scope while making adjustments, technicians had to reach around the side of the instrument near several thousand volts of electricity.

With the new hood, room lights are left on and the technician views the scope from the side of the instrument where he is working.

This idea, submitted under GD/Astro Employee Suggestion program, earned $145.15 for Bird.

Hinckley Assigned To Stanley Aviation

H. W. Hinckley, assistant chief of engineering product design, will represent the president of General Dynamics/Fort Worth at Stanley Aviation for a period of three months.

"He will be responsible for all GD/FW activities with respect to Stanley Aviation," F. W. Davis announced. "All contact with the Stanley organization by GD/FW will be made through Hinckley, or as directed by him."

Stanley Aviation is manufacturer of the B-58 escape capsule.

HERB NAISH SERVES ARMY DUTY TOUR

H. S. Naish, chief of employee services at General Dynamics/Pomona, reported Monday (July 17) for a two-week field officer refresher course at the Army Security Agency, Ft. Devons, Mass. Naish is a major in the Army Reserve.

TRAHEY ATTENDS SCOUT CONFERENCE

Dan Trahey Jr. of GD/FW and family attended a district administration conference of Boy Scouts of America at the Volunteer Training Center, Philmont Scout Ranch, Cimarron, N. M. July 5-11.

McCLURE WORKING ON AEROSPACE PROGRAM

J. Y. McClure, GD/Fort Worth manager of quality control, has been given a special assignment by President Frank W. Davis to coordinate division efforts on the B-58 aerospace ground equipment program.

B-58 Vendor Saving Anticipated As Ninth Seminar Held at FW

A proposed savings of nearly 24 per cent on manufacturing costs of a B-58 fuel strainer at Aircraft Porous Media—first Hustler specialty vendor to attend a seminar here—highlighted the ninth value engineering seminar at General Dynamics/Fort Worth.

Les Seawart of Aircraft Porous Media was on a five-man team which suggested the cost-cutting methods at meetings held from June 26 through July 7.

Stanley Aviation Co., builder of the B-58 escape capsule, was represented at the seminar by C. J. Holub and N. G. Tary.

Eight VE teams, comprising 41 people, proposed total savings of over $100,000 during the two-week seminar. Total savings represented nearly 33 per cent savings over current methods.

Projects, team members and their department numbers were:

Fuel strainer: D. J. Pritchard, 6; D. E. Takes, 6; Seawart, Aircraft Porous Media; H. C. Davis, 87, E. L. Heerwald, 7.

Seal-Engine Air Tunnel: J. L. Woods, 6; R. B. Cameron, 6; R. A. Manke, 4; H. F. Jarrott, 24; A. J. Mazurek, 27.

Work Table: S. Blum, 6; L. V. Rushing, 6; Tary, Stanley Aviation; W. E. Ochiltree, 88; C. F. Coble, 25; M. N. Simons, 22.

Ratio Changer: C. A. Anderson, 6; L. A. Washburn, 6; H. J. Lee, 24; R. D. Honea, 29; D. W. Ascherin, 28.

Cover and Plate: M. C. Krause, 6; W. B. Kirk, 6; Holub, Stanley Aviation; L. W. Bonnell, 89; W. D. Brannon, 8.

Door-Storage of Sun Shields: B. R. Kirkpatrick, 6; S. A. Russell, 6; H. L. Bomar, 81; J. J. Freeman, 16; J. D. Todd, 15.

Duct-Exhaust: L. H. Weth, 6; E. E. Baggett, 6; E. W. Perry, 7; D. H. Norton, 8; R. E. Slawson, 17.

Indirect project-Illustrated Parts Breakdown: J. R. Lopez, 6; P. E. Norris, 6; R. D. Cantrell, 24; A. C. Moore, 85; B. P. Cavnar, 8; R. J. Rigdon, 21.



Corporation Finance Among Fall Classes Scheduled at GD/FW

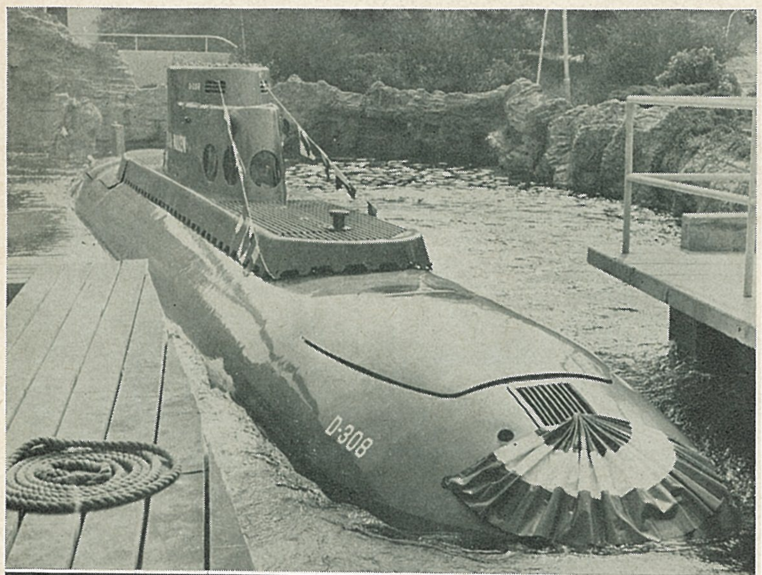
Several graduate courses leading to a master's degree in business administration will be offered at General Dynamics/Fort Worth during the fall semester if interest warrants.

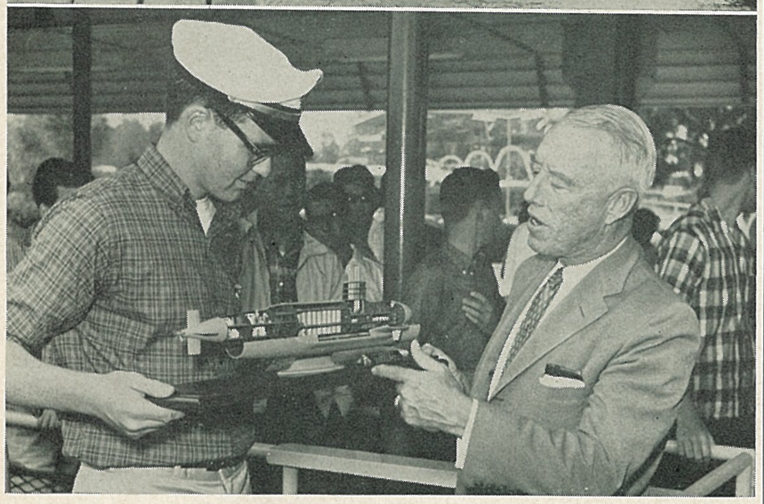
Tentatively offered are four prerequisite courses for the advanced degree: Principles of Economics, Basic Accounting Controls, Business Statistics or Math 333 (Elementary Statistics), and Corporation Finance.

Two other required "core" courses being offered are Techniques of Business Research and Reports, and Business Conditions and Forecasting.

Employees interested in taking any of these courses are urged to contact educational services section (ext. 3442 or 3443) so definite arrangements can be made.

Students who are not interested in graduate credit may take any of the above courses for undergraduate credit.





WINDFALL — Five-millionth visitor to ride General Dynamics-sponsored "Submarine Voyage" at Disneyland was James Townsend, 17, Sherman Oaks, Calif., science student. Below, he is shown receiving memento of day from GD/Pomona President C. F. Horne, model of nuclear-powered USS George Washington, fleet submarine produced by GD's Electric Boat Division.

More B-58 Pod Drops Scored

"Routine" drop demonstrations of the B-58 Hustler two-component pod were chalked up by General Dynamics/Fort Worth crews in July.

No. 38, piloted by Fred Voorhees, made a "satisfactory" high-level drop of an upper component over White Sands Missile Range, N. M. Fred Hewes flew second station, with Ken Timpson in third station.

Another in a series of low-level drops to demonstrate Hustler's pod-retardation system was to be made over Tonopah Test Range, Nevada, in mid-July. Crew was to be Earl Guthrie, pilot; Grover Tate, bombardier-navigator; and O. D. Lively, DSO.

No. 38 made its flight from GD/FW, while No. 4's sortie was to be staged from Kirtland AFB, N.M.

Meanwhile, plans were being finalized for two sea-level drops out of Eglin AFB in mid-August. Team Captain Jim Graham and the crew from Hustler No. 4 visited the area recently.

Bob Norvell, senior flight test engineer, said two drops were being planned.

The first will be a low-level drop over the Eglin land range to check integrity of the retardation system under sea-level conditions.

The second will be a high-level drop over water to demonstrate water-impact performance of the pod.

Completion of the TCP demonstration program is tentatively scheduled for this fall.



"If you like the material, we can make them fit . . . try rolling them up a little higher . . . "

Profits Again

AF, Navy and Airline Contracts Pulled Convair From Red in '49

(Following is installment No. 63 in continuing history of Convair. It deals with days of Convair travail and heavy losses, but by 1948 upturn was in sight.)

At the end of 1948 Convair continued to operate in the red (the loss was reduced to $11.9 millions) but the turning point was at hand. The upturn was foreshadowed that year when Convair's annual sales grew from $47.4 million to $112 million (principal orders being placed by the Air Force, $82 million; the Navy, $5.3 million; and the airlines, $20 million). Profitable operation returned in 1949 when airline sales grew to $24 million and military sales to $173 million. A profit of $3.7 million was reported. Convair's development of the biggest bomber ever built was largely responsible.

The XB-36 had first flown at Fort Worth on the morning of Aug. 8, 1946. Hundreds of cars stood bumper-to-bumper along White Settlement Road and Grant's Lane, streets bordering the field at Carswell Air Force Base, by 9 o'clock. Then the takeoff was delayed a half hour so that thousands of Convair employees could leave plant buildings west of the field and mass along the fence. Test Pilot B. A. Erickson revved up the plane's six pusher engines and released the brakes. The cigar-shaped giant accelerated down the runway on wheels nearly 10 feet high and lifted smoothly, borne on a broad wing having double the span of the four-engine B-24. The crowd roared.

Over the next eight years, 384 more B-36s would roll down the same runway to give the Air Force a powerful fleet of intercontinental bombers (capable of flying 10,000 miles without refueling and dropping a 10,000-pound bomb load at a half-way point). The B-36 was to serve as the nation's prime nuclear weapon carrier for a decade of cold war. (Gen. Nathan F. Twining, AF chief of staff, would say in 1955 that the B-36 "perhaps more than any other factor, has kept us from being attacked.")

Although first flown in 1946, the B-36 dated back to a time nine months before Pearl Harbor. On April 11, 1941, the Air Corps invited Consolidated and Boeing to submit preliminary design studies for a bomber of intercontinental range. (At this time the longest-range bombers of World War II, the B-29 and B-32, were still in mockup stage.)

On May 3, Consolidated submitted a preliminary proposal for a high-wing, twin-tail, pressurized monoplane resembling the final B-36. Design studies continued during the summer. Germany's swift invasion of Russia increased fears that the Axis powers might conquer all Europe, leaving the United States isolated. When the problem was reviewed at a high-level Air Force conference Aug. 14, four companies were reported to be at work on intercontinental bomber designs, Consolidated, Boeing, Douglas and Northrop (the last named on a flying wing design).

On Aug. 24 the Chief of the Air Corps was directed to supply the most up-to-date information on desired characteristics to all four. In October, after reviewing data submitted by the various companies, the Air Corps decided to award a contract to Consolidated for two experimental six-engine bombers. A cost-plus-fixed-fee contract was signed Nov. 15, and construction of a mockup began at San Diego. By 1942, however, the coast plant was employing all its capacity for bomber and seaplane production and the XB-36 project was transferred in August to the new Fort Worth plant.

★ GENERAL DYNAMICS CORPORATION NEWS ★

A portable, self-regulating atomic power plant to generate electricity beneath the surface of the sea or in remote land areas of the world without requiring any operating personnel is being developed at General Atomic Division.

Based on the TRIGA reactor concept, the small "package" plant will be capable of long-term, unattended operation at generating capabilities up to 2,000 electrical kilowatts.

A version of the completely automated plant would be applicable to undersea operation as a power source for naval defense systems. On land, the small power plant could provide electricity for military, weather or communication stations in polar and other remote regions.

★ ★ ★

A unique "supermarket" where scientists and engineers push grocery carts up and down the aisles, shopping for items used in putting the peaceful atom to work, is in operation at General Atomic.

The self-service supply center displays thousands of items in neat array on its shelves, ranging from such staples as nuts and bolts, valves and tubing, to specialty items that include tiny electronic components and precious metals.

In following the "supermarket" concept, General Atomic has eliminated many standard warehouse and stockroom practices. A maximum of four hours is required for an item to be received at the warehouse, checked and weighed in at the 10,000 square-foot supply center, placed in stock and checked out to a user.

★ ★ ★

General Dynamics/Electronics has won the Army Signal Corps' "RIQAP" Award in recognition of that division's production of high quality electronic products for the Armed Forces.

"RIQAP"—Reduced Inspection Quality Assurance Plan—is the highest recognition the Signal Corps can bestow on a manufacturer.

GD/Electronics became the first New York State company to qualify for the "RIQAP" flag in a flag-raising ceremony held recently at the division headquarters and telecommunications plant in Rochester. Brig. Gen. Charles S. Hays, commanding the Army's Signal Supply Agency, joined Division President James D. McLean in hoisting the distinctive orange and white "Q" (for quality) flag on the division flagstaff.

★ ★ ★

In an address before the annual meeting of the San Diego County Boy Scout Council, C. Rhoades MacBride stressed that discipline and the reinforcement of fundamental principles are needed for an effective fight against communism.

The General Dynamics executive vice president said that today's children will win or lose the battle against communism. He urged adults to take aggressive steps to educate children with a wider outlook and a basic respect for life. He added that adults should set an example by not compromising with principle to gain a point.

Discipline, he added, is a basic ingredient of character which, as a way of life, can be fun, happy, tough and challenging.

★ ★ ★

General Atomic has received a $1 million Air Force contract for classified work of an undisclosed nature.

★ ★ ★

The Convair 1810 Dynapak machine is being used at American Brake Shoe's Mahawah, N. J., plant on an experimental basis to produce close-tolerance, dense, grain-oriented forgings in alloy steels, exotic materials and powder metals. Dynapak is a forging machine capable of exerting 430,000 foot/pounds of energy with a ram fired by the sudden release of gas compressed to 2,000 psi.

★ ★ ★

General Dynamics/Electronics will supply the instrumentation and control systems for the 100 kilowatt mockup reactor being built by Lockheed for the NASA nuclear facility at Plum Brook, Ohio.

★ ★ ★

General Atomic's John Jay Hopkins Laboratory for Pure and Applied Science has been cited by the American Institute of Steel Construction for its outstanding design in structural steel. Nine buildings completed in 1960 were cited in the Institute's second annual architectural competition for structural steel design.

★ ★ ★

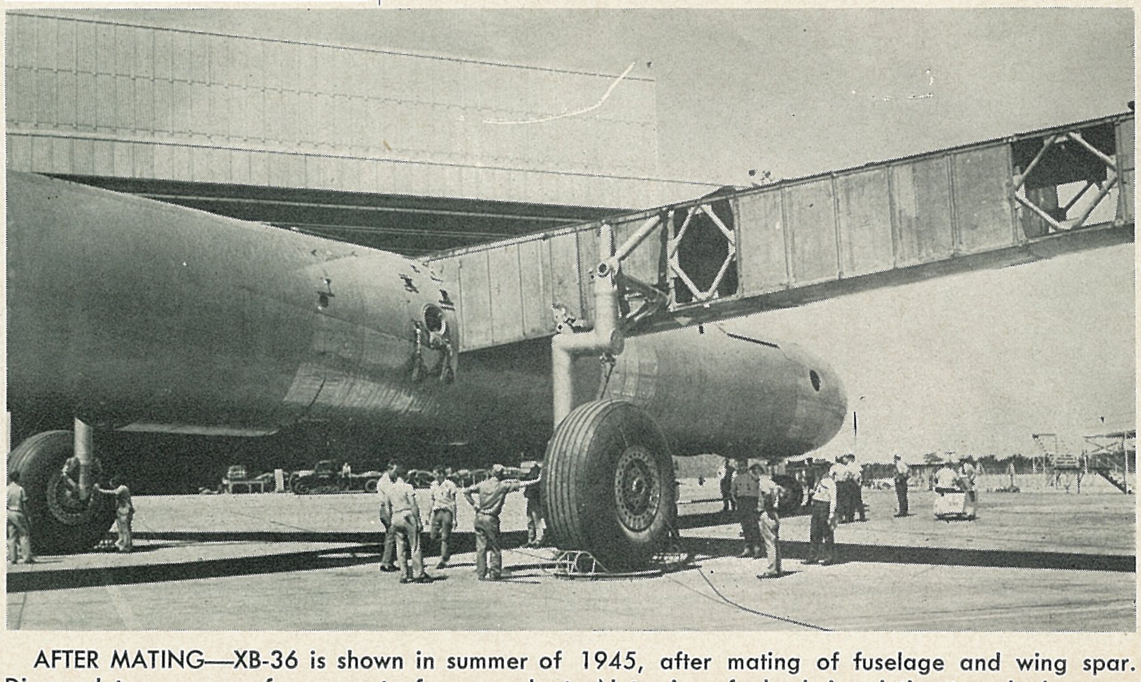
Electric Boat has laid the keel for a new nuclear submarine on the same ways from which another A-Sub was launched June 15. The keel for the Alexander Hamilton was laid within ten days after the Thomas Edison was launched. Both are designed to fire the long-range (2,500-mile) Polaris missile.

★ ★ ★

More than 100 Electric Boat employees are on loan to the Navy's Portsmouth, N. H., shipyard to help ease a shortage of skilled pipe-fitters which has delayed work on Polaris submarines at the naval shipyard. They will spend 90 days at Portsmouth.

★ ★ ★

Seaboard World Airlines has taken delivery of the first unit of an order for five Canadair CL-44 prop-jet, swingtail cargo aircraft. With a capacity of 65,000 pounds of freight, the CL-44 will be used on the company's all-cargo routes across the North Atlantic.



AFTER MATING—XB-36 is shown in summer of 1945, after mating of fuselage and wing spar. Diamond trusses were for support of power plants. Note size of wheels in relation to onlookers.

GD Performers Play Starlight

A number of General Dynamics employees are spending their summer evenings entertaining patrons of Starlight Opera in San Diego.

Richard Keating of Astronautics is in the chorus of "Red Mill," "Annie Get Your Gun," "Chocolate Soldier." Astro's Lam-Tai Cheung plays "Liu Ma" in "Flower Drum Song" and Les Cozzens of Astro has the second lead, "Alexius," in "Chocolate Soldier."

Don Minter of Convair appears as "Frankie Wing" in "Flower Drum Song," is also in the chorus of four other productions. Convair's Robert Reuther is serving as technical adviser for firearms for "Destry" and "Annie."

One of the busiest Starlight performers is Priscilla Lawson, daughter of L. G. Lawson, Convair Dept. 188.

Priscilla appeared as "Rose Love Joy" in "Destry," will play "Dolly Tate" in "Annie," and the "night club singer" in "Flower Drum Song." In addition she is in the chorus of other musicals.

Also appearing in the dance chorus of the musicals is Dennis Pope, son of Astro's C. C. Pope.

SKI CLUB OFFERS FREE INSTRUCTION

Free instruction for beginning water skiers will continue to be offered by Convair Water Ski Club throughout July, reports Gene Sevigny, club commissioner.

All interested Convair people and their families are invited to participate at the club-sponsored outings. Skis are available for use without charge. Only expense is a 25¢-a-mile towing fee.

Upcoming schedule of outings for club members and others interested is July 22, 23, 29, between 9 a.m. and 1 p.m., all at Tierra del Fuego on Mission Bay.

Also planned is a combination ski session and business meeting on Thursday (July 27) between 5:30 and sunset at Santa Clara Point.

75c Reduction for Wednesday Games

Baseball fans at GD/Convair are reminded that discount tickets to Wednesday home games of the Padres may be picked up at Convair employee services the Monday before each tilt. Tickets are good for 75 cents off regular general admission or box seat prices when exchanged at Westgate Park box office.

Saturday Schedule For Salvage Yards

Employees at Convair and Astronautics plants may do their shopping at the salvage yards on the following Saturday morning schedule:

Convair—July 22 and Aug. 5.
Astro—July 29 and Aug. 12.

Both Astro and Convair people are eligible to shop at either location. Hours at both yards are from 8 a.m. until noon.

Joint GD Teams Sweep Three IRC Gun Events

Gun Clubbers from General Dynamics/Convair and General Dynamics/Astronautics shot down the top spots in rifle, trap and skeet to sweep the field at the eighth annual Industrial Recreation Council Gun Shoot held July 2.

General Dynamics marksmen triggered the most targets in each event to best contestants from Ryan, Rohr, Solar and Sheriff's Department.

Leading General Dynamics to victory in the rifle competition were Harold Schnaubelt, who led the squad with 377 points (including 14 bull's-eyes), Earl Day, Bob Saether and Bill Isbell.

Shooting the GD trap squad into first place were W. U. Gatterman, Robert Cushman, Jay Cushman, Howard Jacklin and "Andy" Anderson. Gatterman led the point parade with a total of 49.

Members of the first-place GD skeet squad were J. K. Field, Ken Wulfemeyer, W. E. "Bill" Rickman, Jim Hartman and C. W. "Red" Pharis.

Each of the top teams gained custody of a perpetual trophy and each shooter received an individual award.

Father-Son Team Wins Skeet Shoot

A sharpshooting father and son combination teamed up to win the top two spots at a joint Convair and Astronautics Gun Club skeet shoot July 9 at Gillespie Field.

First James K. Field, Convair chief of employee services, hit 50 straight targets to win the high overall trophy, then his 14-year-old son, Stephen, hit 48 of 50 to win the Class AA-A trophy.

Astro's Jim Hartman took Class B-C honors with 48 of 50 attempts and Wayne Olson was first in Class D-E, hitting 46 of 50.

Six GD Youngsters On All-Star Squad

At least six Convair and Astronautics youngsters have earned positions on the National City-Paradise Hills Pony League all-star team which will compete in the district tournament July 26-27-28-29.

Manager of the NATPAR team is Hamilton Stewart (Convair Dept. 128) and coach is Victor Contreres (Convair Dept. 110), reports Frank Chenelle (Convair Dept. 101), NATPAR president.

GD sons who will be taking the field for the tournament include Victor Lugo, pitcher; Herb Stewart, 2nd base; Jim Finnerty, 3rd base; Pete McHugh, catcher; Vic Gallardo, 1st base; Bruce Royer, ss.

Sportfish Offer Ends This Month

GD/Convair fishermen have only a few more days to take advantage of discount rates on sportsfishing trips from Seaforth Landing, 1641 Quivera Road, Mission Bay. Exchange tickets worth a dollar off regular price of $5.50 for a half-day trip will be on hand at Convair employee services until the end of July only.

Joint Gun Club Shoot Slated For July 23

The joint GD/Convair and Astronautics CRA Gun Club will hold an Amateur Trapshooting Association-registered shoot at Gillespie Field at 9:30 a.m., July 23.

First event will be 100 targets at 16 yards, followed by a second event of 100 handicap targets. Third round will consist of 25 pairs of doubles. This shoot is open to public participation.

A competition shoot against the South Gate Gun Club will be featured by the General Dynamic club at 10 a.m., July 30. The CRA group won an earlier contest with the South Gate Club in May.

Scores of the 10 highest shooters from each team will determine the winner. All General Dynamics employees wishing to participate have been encouraged to contact Jack Swank, Convair ext. 1161, or Ezra Johnson, CRA commissioner, ext. 2283, Astro.

Plant 2 Gets Water Mains

Water mains at Plant 2, General Dynamics/Convair, are being replaced in an Air Force renovation project.

Modern cement-lined pipes will replace approximately 4,000 feet of the present water-conducting system through Bldgs. 1, 2, and 3. The new corrosion and rustproof piping will eliminate the original cast iron pipes installed 20 years ago when the plant was built.

George Crawford Co., Coronado plumbing firm, is in charge of the $60,000 project which will be completed this month.

At the same time, under another AF contract, outmoded equipment in the Plant 2 cafeteria kitchen is being replaced. New sinks, ovens, and the large garbage disposer are being installed by Berlin Food and Equipment Co. Astra Flooring Co. is in charge of laying a new floor covering of magnesite, new-type resilient concrete product.

GD/Convair plant engineering handled specifications and coordinated work.

Dept. 137 Winner Of Shop Softball

Dept. 137 with a record of six victories and one defeat emerged undisputed champion of the first round of shop softball at General Dynamics/Convair.

Second-half activity is now under way and the winner will meet Dept. 137 in a championship play-off at end of the season.

Other first-round standings were Electronics, second, with a record of 4½-2½. Dynamics, Rose Canyon, Dept. 97 and Dept. 135 all ended up with a 4-3 record; Material was ranked next with a 1-6 slate, followed by Dept. 400, 0-7.

115 GD/E Couples Hit Dance Floor

Some 115 couples attended a holiday dance July 1 for employees of General Dynamics/Electronics in San Diego at Elks Lodge.

Juanita Hogue of GD/Electronics handled preparations for the affair. Door prizes were awarded, and music was by the Pete Pratto orchestra.



FRIENDS—R. S. Watt shakes hands with friends after retirement party thrown in his honor July 8. A top tooling man at GD/Convair for 25 years, Watt received plaque inscribed with signatures of 200 tooling and production people.

Widely Known and Respected, Bob Watt of Tooling Retires

R. S. Watt, veteran Convair tooling man for 25 years, was feted at a retirement party July 8 by more than 100 company friends.

A native of Scotland, Watt joined Consolidated at San Diego in 1936 and has held positions of foreman, general foreman and supervisor of tooling operations.

Watt was given retirement cards at the party by Keith Sears of employee services and L. G. Lawson, representative of the General Dynamics/Convair Management Club. Joe Williamson (Dept. 401) was master of ceremonies.

In a short speech Watt said Convair had been very good to him and his family. "The company gave me the opportunity to educate my children and provide for the future," he said.

Among those in attendance were A. E. Hill, night manager of General Dynamics/Astronautics; H. W. Rubottom, GD/Convair chief of educational services; W. P. Woods, GD/Convair chief tool engineer; Dick Wilkens Jr., GD/Convair manager of industrial relations.

Watt received a plaque inscribed with signatures of 200 tooling and production people—all close friends Watt had made over the years.

Committee Chairmen Named As Dill Takes Mgt. Club Reins

Twenty-eight committee chairmen of General Dynamics/Convair Management Club have been appointed for 1961-62 by Roy Dill, club president.

They are Keith Blair (Dept. 6), scholarship; J. B. Skibinski (6), dinner; P. A. Hamm (8), education; E. W. Manning (25), audit; A. D. Parsons (31), Con-Trib-Club; C. E. Routh (15), membership Plant 1; R. A. Davis (218), membership Plant 2; R. G. Macomber (93), membership Rose Canyon.

And K. A. Sears (3), life retirement; H. C. Hoskins (192), program; V. A. Petricola (8), welfare; A. P. Langlois (190), tickets Plant 1; K. S. Kelly (292), tickets Plant 2; J. J. Loperna (14), tickets Rose Canyon; C. E. Boyd (197), Air Explorer Scouts.

And F. W. Greel (25), property; T. W. Ochodnicky (6), forms control; J. R. Colvin (6), publicity and public relations; J. A. Fergus (6), Managair; J. A. Woodhouse (190), raffle; T. H. Chadwick (temporarily with GD/Astronautics), bowling; S. R. Sharp (3), J. M. Aguilar (3), sergeants at arms; A. D. Comito (3), special projects.

And M. B. Bodger (31), Junior Achievement; A. G. Angus (8), MacSave-it; G. R. Bailey (197), Mug of Month; C. W. Maxfield (120), golf.

Eagles Unbeaten In Second Round

The Convair Eagles last week were the only undefeated team in the second round of Industrial A Softball League competition.

Winner already of the first half of league play, the Eagles won their opening second-round game 3-1 from Naval Air Station behind the four-hit hurling of newly-acquired pitcher Gordon Hedberg. A single by George Cooper drove in the winning runs.

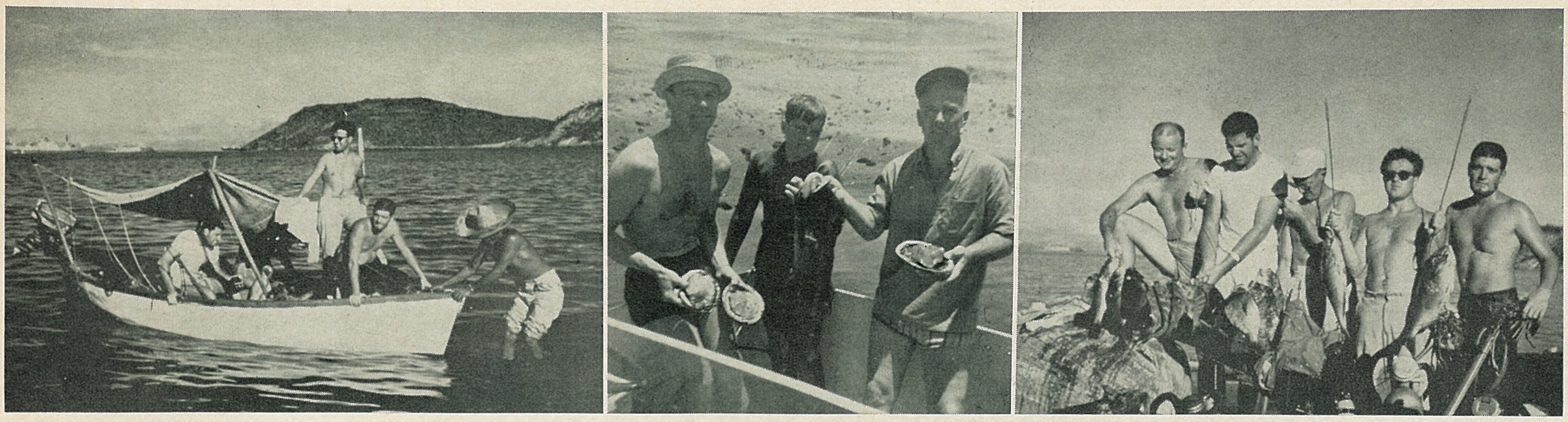
The Eagles won another second-round tilt 5-4 when first-baseman Dee Trepanier rapped a high infield single to score Chuck Vanderhoff from third base in the seventh inning.



"MR. CLEAN"—E. G. Johnson (Dept. 160) slips thick socks over shoes before entering Japan Air Lines 880-M in field operations. Reason for precaution is to protect carpets inside plane from being tracked. Delicate carpet pattern in JAL plane is derived from raked sands of classic Japanese dry gardens.



SPEECH MAKERS—Three GD/Convair women were installed as officers of Delta Toastmistresses July 14. From left are Catharine Whelan, club representative; Lee Betts (wife of L. T. Betts, Dept. 44), president; Barbara Macdonald (Dept. 91), secretary; Martha Woodberry (Dept. 3-2), vice president.



WATER WHIRL—Tempo of Delta Divers activities is on upswing during summer months, will get additional impetus during next few weeks as group breaks in newly-acquired diving boat. Photos on either end show members "roughing it" on recent excursion in Mexican waters. Plenty of fish, scallops and abalone were taken to fill meal menus. Middle photo was made on club trip off San Diego shores. Group won honors with 90-lb. catch in San Diego Council of Skindiving Club's meet.

Mgt. Club Bowlers End League Season

A Mixed Foursome Bowling League, sponsored by General Dynamics/Convair Management Club, concluded summer activity with "The Happy Four" squad firmly holding down first place with an 11-game lead.

The team, composed of captain Bob Beezley and his wife, Lillian, Jim Stevens and his daughter, Sylvia, also won high team series in addition to first-place trophies.

Individual honors in the league went to Jerry Chambers, high women's game; Charlotte McLaughlin, high women's series; Gordon Stickney, high men's game; Eddie Raymond, high men's series. Lillian Beezley and Vince Cernuto received "most improved average" awards.

Seats Discounted For La Jolla Plays

GD/Convair play-goers may attend La Jolla Playhouse performances at 20 per cent off regular orchestra ticket prices through a special industrial offer.

Exchange coupons, which may be used for any of the four remaining plays, are available now at Convair employee services. One coupon is needed for each ticket and may be presented for exchange at Walker-Scott box office, Girard and Wall Sts., La Jolla.

Ending this week is "Five Finger Exercise." "The Sound of Murder" will be presented July 24 through Aug. 5; "Invitation to a March," Aug. 7-19; "A Majority of One," Aug. 21-Sept. 2.

Grayson to Judge Quarterly Contest

Wayne Grayson, president of Southern California Association of Camera Clubs, will judge entries of Convair camera fans at the July 24 quarterly contest.

Competition at the 7:30 p.m. contest in Balboa Park's Photo Arts Bldg. will be open to members only, however, visitors are welcome to attend to hear Grayson's comments and suggestions. A well-known photographer in the San Diego area, Grayson also is a color-slide exhibitor of the Photographic Society of America.

Cash awards will be given at the CRA club's Monday meeting for best black and white and color entries.

Dynamics Travelers Off on Hawaii Trip

Eighty-five General Dynamics people from two divisions were scheduled to depart last Saturday (July 15) by chartered plane for an eight-day vacation in Hawaii.

The vacationers, from GD/Convair and GD/Pomona, are scheduled to return Sunday (July 23).

High points on the trip, which was arranged by CRA, include a Pearl Harbor cruise, a circle tour of the Island of Oahu, a traditional "luau," a Mt. Tantalus tour, the Kodak Hawaii show, a tour of a pineapple plant, and an optional trip to the Island of Kauai.

CRA *Sports & Recreation* Convairiety

Road Runners Second Largest Traveling Club in SD County

Convair Road Runners, now second largest travel trailer club in county with 45 families, will travel into San Diego back country this weekend (July 21-23) for their second July outing.

They will set up camp at Hulbard's Grove, about 40 miles east of San Diego. The camping site is reached via Highway 80 to Descanso Junction, left for one mile to Descanso, and from there another mile to Hulbard's Grove. Trailer fee is $1 per night. Available facilities include electrical hookup, water, nearby stores, and swimming.

Entertainment arranged by Jess Parsons, wagonmaster, and his assistant, L. G. Cragg, will be motion pictures, an old-fashioned potluck supper, and a get-together with the Wagons West Club which will be camping at the grove during the weekend.

More information may be obtained by calling Parsons, HI-4-5065, or Cragg, AC-3-6864.

The Convair trailer club has been chosen to handle all publicity for the third annual Travel Trailer Clubs of America Border District Rally set for Sept. 28-Oct. 1 at Del Mar. It is the first company-sponsored group to have a major role in District Rallys.

Hal Perkins and Carl Scholl, as co-chairmen, and Iris Scholl, secretary, will spearhead arrangements with the entire membership to join in the club project. At least 500 trailers and as many as 1,500 people are expected to gather for this year's get-together.

Discount Tickets For Two Musicals

Reduced-price tickets will go on sale tomorrow morning (July 20) at 9 a.m. at GD/Convair employee services to two musical productions.

Convair people may purchase discount tickets to "New Moon," Circle Arts Theatre, and to "Annie Get Your Gun," Starlight Opera production. Tickets will be good for Convair nights set for July 30 for "New Moon," and Aug. 6 for "Annie Get Your Gun."

Reduction on Starlight Opera performances is 30 per cent of regular price of $3.50, making the CRA cost $2.45 per seat.

Circle Arts Theatre tickets are reduced to $2.75, $2.20, $1.80, and $1.40.

Swap Night Slated For Coin Clubbers

Bartering will enliven the meeting of Convair Coin Club members tomorrow evening (July 20) at 7:30 p.m. in the Convair cafeteria executive dining room.

"Everyone should bring those duplicate coins and swap them for some they need," urged Al Baber, club president.

A business meeting will precede the swapping which will be followed by refreshments and drawing for a 1961 proof set. Guests are invited to take part in the swap night activities.

CRA Calendar

(Convair Recreation Association has some 40 activities in operation. For information on Convair sports, call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

ARCHERY — Meeting tomorrow night (July 20) at 7:30 p.m., CRA Clubhouse, Pacific Highway.

ASTRONOMY — Meeting July 21 Gillespie Field recreation area, 8 p.m.

BRIDGE CLUB—Weekly sessions every Tuesday, 7:30 p.m., Barcelona Hotel, 326 Juniper St.

CAMERA CLUB — Quarterly contest July 24, 7:30 p.m., Photo Arts Bldg., Balboa Park.

COIN CLUB—Swap night tomorrow (July 20), 7:30 p.m., Convair cafeteria executive dining room.

DELTA DIVERS—Family dive Sunday (July 23) Wind and Sea Beach. Meeting July 25, 7:30 p.m., Balboa Park Conference Bldg., Room 3.

GOLF—Reservations open today for CRA sweeps Aug. 5-6 Coronado. Call ext. 1705 before July 28.

GUN CLUB — ATA registered shoot July 23, 9:30 a.m., Gillespie Field range.

JUDO—Workouts and instruction each Thursday evening, 7-8:30 p.m., CRA Clubhouse, Pacific Hwy.

MODEL RAILROAD — Meetings each Friday, 7:30 p.m., House of Charm, Balboa Park.

MOVIES—Reduced-price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB — Next shoot July 23, 9 a.m., San Diego Police Pistol Range, Federal Blvd. and Home Ave.

RADIO CLUB—Meeting tomorrow (July 20), 7 p.m., Harbor Drive headquarters.

ROAD RUNNERS — Weekend outing July 21-23, Hulbard's Grove. Call Jess Parsons, HI-4-5065, or L. G. Cragg, AC-3-6864, for information.

SPORTS CAR CLUB—Observation tour and picnic July 23.

VOLLEYBALL—Informal play for Convair families each Wednesday, 7-10 p.m., Federal Bldg., Balboa Park.

WATER SKI CLUB — Skiing July 22, 23, 29, between 9 a.m. and 1 p.m., Tierra del Fuego, Mission Bay. Ski session and business meeting July 27, 5:30 p.m., Santa Clara Point.

Delta Divers Increase Tempo Of Scheduled Club Activities

A family dive next Sunday and a meeting on Tuesday are the next scheduled events for members and guests of Convair Delta Divers, according to Harry Ruscigno, club spokesman.

The meeting will be held July 25 at 7:30 p.m. in the Balboa Park Conference Bldg., Room 3. Underwater movies will be shown. Wind and Sea Beach will be the setting for the family dive on July 23 starting at 10 a.m.

Tentatively scheduled for sometime in early August is another club-sponsored trip to the Coronado Islands. Interested Convair families are invited to attend the excursion. Weekend trips to either Mexico or the Coronado Islands are conducted by the CRA group on an alternating basis each month.

Ruscigno also reported that the club's recent purchase of a diving boat will bring the kelp beds just a step in the water away for members. He said the diving boat would probably be used weekly, accompanying the fleet of craft privately owned by members.

Divers who made an excursion to the kelp beds July 9 produced limits of red abalone as well as several calico bass and sheepshead. On a recent outing in Mexican waters Delta Divers had a good measure of success with plenty of fish, scallops and abalone providing a full menu for each meal.

GD GIRLS TO PLAY TENNIS NATIONALS

Two up and coming 14-year-old junior tennis stars, both daughters of General Dynamics parents, will take part in state, regional and national tournaments during the coming weeks.

Kathy Blake, daughter of C. L. Blake of General Dynamics Corporate Office, and Joan Chabot, daughter of L. B. Chabot of General Dynamics/Astronautics, will compete in Louisville at the Kentucky State Championships, travel on to Middletown, Ohio, for the Western Championships and then swing racquets in the Nationals in Cincinnati.

Participation in the state and regional tournaments will give the girls a chance to adjust their games to clay court competition for the Nationals.

Earlier this month Kathy won the 15 and 18-year-old junior titles at the 45th annual La Jolla Tennis Championships. She topped this performance by making it all the way to the women's singles finals.

Observation Tour Set by Car Club

Members and guests of Convair Sports Car Club will be scanning the scenery on their Sunday (July 23) driving event.

They will be asked to describe specific landmarks along the route of the two-hour "observation tour" which will take them from San Diego Zoo parking lot to Pecan Park.

When they reach the CRA picnic grounds, they will gather round for a family-style picnic with free refreshments. Each family will provide its own lunch. Prizes will be given for the best observation scores and a drawing will be held for door prizes.

Coronado Sweeps Entries Now Open

Convair Recreation Association's golf caravan will hit Coronado Aug. 5-6 for a monthly sweepstakes event.

Reservations open today at ext. 1705, Plant 1, and will close July 28, said CRA Commissioner Ken Wulfemeyer.

39-lb. Halibut Wins Contest

Three top anglers of the Convair CRA Fishing Club were in the money for their June catches.

H. W. Dvorak of Dept. 6 hauled in a 39-lb. halibut off the Coronado Islands on a 20-lb. test line for top prize of $15. Ruth Menzie, wife of Commissioner R. W. Menzie (Dept. 31), whose fishing prowess has won her many awards, took second prize of $10 with a 13-lb., 4-oz. corvina caught in Salton Sea. Third prize of $5 went to Wallace H. Reed (Dept. 144) for a 4-lb. large mouth bass netted at Sutherland Lake.

A special Saturday meeting will be scheduled in August so that all night-shift people, and others who have not been able to receive their button awards during the year, may be present for a mass presentation. Another Saturday meeting will be held in December, said Menzie, to take care of winners during the fall months.

Hornburg Top Gun At Convair Shoot

Carl Hornburg's (Dept. 139) 291 score was the top tally at the July 9 Convair Pistol Club shoot, Ash Bishop, commissioner, reported.

Placing second in the master class was B. L. Broadway (Dept. 115) with 285 points. P. C. Dubendorf (Dept. 115) and E. E. Bickar (Dept. 215) placed one-two in the expert class with 277 and 276.

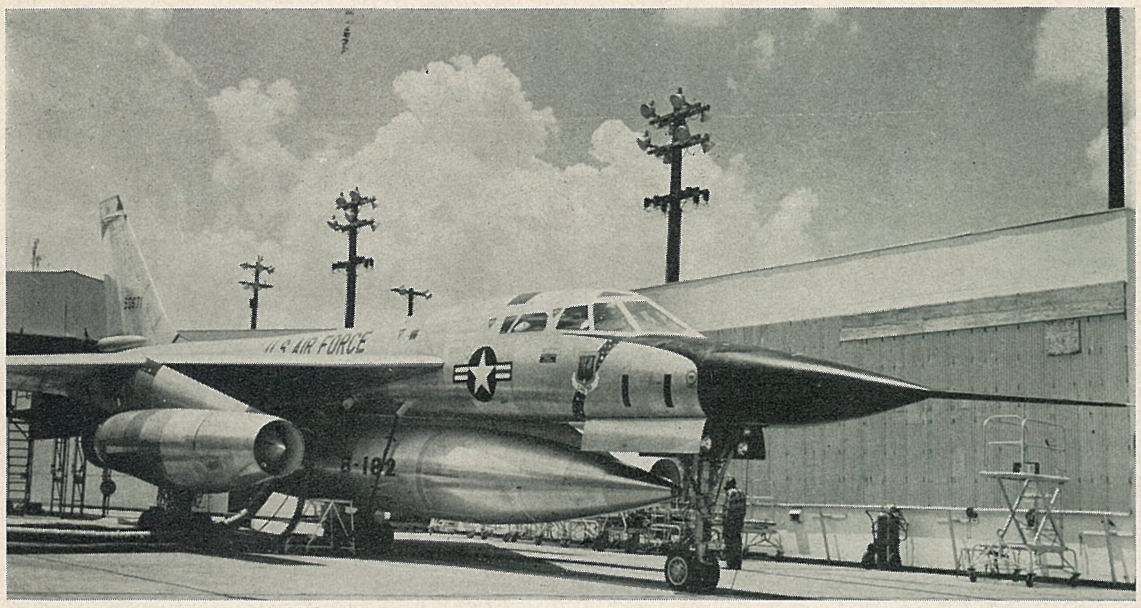
Sharpshooter honors in the police course competition were claimed by H. W. Holmerud (Dept. 3-1), 273, and Bill Ginsky (Dept. 6), 261.

Pacing performers in the short national shooting were Bickar, Hornburg, Bishop, Ralph Picard (GD/E Dept. 6), in that order, with scores of 275, 273, 270, 267.

Fed-Mart Revises Membership Rule

Fed-Mart Corporation has extended membership to all General Dynamics/Convair employees who are home owners.

The new home ownership classification replaces the previous arrangement which limited GD/-Convair membership to those employees who had been with the company for three consecutive years.



TRAINER BOMBER—TB-58 No. 12 was fourth test Hustler to be converted to trainer configuration (note added window space). Above, plane preps for flight to 305th Bomb Wing, Bunker Hill AFB, where it is now in service.

Sorties in TB-58 a 'Must' For Pilots Before They Solo in Combat Hustler

Hustler pilots will have logged nearly 200 training sorties in TB-58s next month, when the first trainer bomber completes its first year of Air Force service.



TB-58 No. 11, the first of four test Hustlers converted to trainer configuration, joined 43rd Bomb Wing last August.

Nos. 13 and 14 joined the wing's Combat Crew Training School inventory later in the year, and last month No. 12 was ushered into service as a proficiency trainer in the 305th Bomb Wing, Bunker Hill AFB.

Used on a virtual every-other-day schedule at Carswell, the workhorse trainers have been "running as predicted," according to Lt. Col. Gordon L. Brownlee, chief training division.

"Every B-58 pilot takes two flights in the TB with an instructor before soloing in a combat-ready Hustler," Colonel Brownlee said.

"The student DSO—who handles many co-pilot-type duties in the B-58, also flies with the trainer pilot on these two missions to perfect crew coordination, especially during practice takeoffs and landings, and during acceleration to supersonic speeds."

First station of the TB is occupied by the student pilot; the second by the instructor pilot. Second station is built slightly up and to the right of first station, giving the instructor over-the-shoulder surveillance during flights.

The instrument control panel in the first station is duplicated in the second. Controls are connected mechanically—thus every action the student pilot makes is duplicated in second-station controls.

But the instructor pilot determines who maintains control, and he also controls fuel-transfer operations.

Added skylights and "vista vision" windows in the TB make landing possible from second station.

Eventually, TB-58 No. 13 will be transferred to the 305th Bomb Wing, equipping each Hustler wing with two trainers.

880s and 990s, Like Hollywood Stars, Often on Scales to Watch Weight

In addition to beauty, General Dynamics/Convair 880 and 990 jet airliners have one thing in common with movie queens—both have to watch their weight.

And odds are that the huge jet queens are weighed more often than even the most diet-conscious film star. Depending upon type of testing, GD/Convair jets may be weighed before and after every flight.

Measuring the poundage of an 880 or 990 is an exacting science—no more than a 5-lb. tolerance is permitted for each of the three mechanical platform scales on which the jet's landing gears are positioned. (Typical "rollout" weight of a 990 is 112,000 lbs.)

When a jetliner is rolled onto the scales in field operations at GD/Convair even the time of day may affect the "weighing in" procedure, according to C. E. Beddoes, weights group engineer.

If practical, the planes are weighed at night or in early-morning hours. As a rule, wind velocities reach their peak during the day, affecting the weight of the airplane as it sits on the scales, said Beddoes.

Watching the weight of the newest Convair transports was started long before the first plane reached the assembly stage. In theory, everything going into the plane was weighed, down to the smallest screw weighing .0008 lb.

Platform scales at the San Diego plant can be placed in pits located in both field operations and directly under the last assembly station in Bldg. 3. To insure accuracy, scales are checked and tested every six months by the county department of weights and measures.

Scale capacities are 56,000 lbs. for the nose gear and 125,000 lbs. for each of the main landing gears.

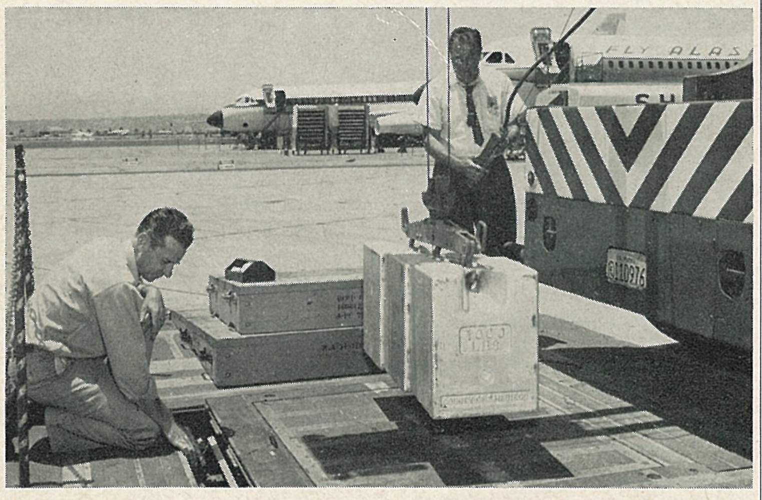
In addition to the mechanical scales, jets at the San Diego plant are sometimes weighed with electronic kits, which have a capacity of 400,000 lbs. and are accurate to 1/10th of 1 per cent.

The electronic kits are used regularly by most airlines because space is usually at a premium. The mechanical scales are used most often at GD/Convair because they are already in position and do not require the "set up" time needed for the electronic kits, said Beddoes.

An airplane must be absolutely level, at least longitudinally, before it can be weighed. GD/Convair engineers use any one of six methods to determine whether or not an 880 or 990 is level.

Two require use of an engineer's transit or sight level, two use a spirit level, one a plumb bob, and the other a 50-foot hose, preferably with transparent end sections.

Though the last method may appear homespun, it is highly regarded by GD/Convair engineers. After filling the hose with water, water levels at each end of the hose are matched with drill marks located fore and aft on the external longeron. Readings are compared and the airplane is adjusted by raising or lowering the nose until water levels are identical.



JUST RIGHT—Calibrating mechanical platform scales used to weigh GD/Convair jet transports are Edward A. Wassman (right), deputy sealer of San Diego County department of weights and measures, and William McFarlane (Dept. 25). Scales, located in field operations, are checked twice a year by county for accuracy.

'Biggest Smile' Title Goes to Astro Tot

A young General Dynamics/Astronautics "cherub" has begun to win trophies at a rather early age—nine months.

James Rohr Davila, son of R. G. Davila of Dept. 250, took home a trophy as the child with the biggest smile during judging at the recent East San Diego County Fair, El Cajon.

F-106s Register Perfect Score With 100% Kills During Tyndall Drills

GD/Convair F-106s registered the only perfect score last month in evaluation exercises at Tyndall AFB, Fla.

Six F-106s from the 27th Fighter-Interceptor Squadron, Loring AFB, Me., flew one flight each on Ryan Q-2C Firebee targets and all flew a perfect mission, scoring a 100 per cent "kill."

Squadron personnel said it was the first time that a perfect score was achieved while flying in "auto-flight mode." The accomplishment was considered especially significant because of poor weather before and during the flight.

In charge of the Tyndall flight deployment was Maj. Emmett S. Barrantine, director of materiel. The 27th FIS is commanded by Lt. Col. Eugene L. Hinkley.

Other aircraft being evaluated at the same time were F-89s, F-101s and another F-106 squadron, according to R. L. Matthews, GD/Convair field service representative at Loring, who was present at the Tyndall deployment.

Brig. Gen. Branch Edwards Commander

ANTELOPE VALLEY — New commander of the Air Force Flight Test Center, Edwards AFB, is Brig. Gen. Irving L. "Twig" Branch, according to an announcement from Gen. Bernard A. Schriever, commander, Air Force Systems Command.

In addition to the main flight test center at Edwards AFB, General Branch is responsible for Edwards Rocket Site where General Dynamics / Astronautics conducts Atlas static tests.



WATCHING WIVES—Returning home to Loring AFB, Me., six F-106s of 27th Fighter-Interceptor Squadron streak overhead as wives watch. Squadron made perfect score last month during evaluation exercises at Tyndall AFB, Fla.



FLYING HIGH—Lt. Col. Ernest E. Biggs (center), commander of 4th FIS, Misawa Air Bose, Japan, accepts Pacific Air Forces Flying Safety Trophy for 1960 from Lt. Gen. Robert W. Burns (right), commander of Fifth Air Force. Looking on at left is Brig. Gen. Travis M. Hetherington, commander of 39th Air Division at Misawa AB. Flying GD/Convair-built F-102s, squadron won award for outstanding flying safety performance record.

F-102 FIS Assigned to Japan Wins Pacific AF Flying Safety

An F-102 squadron at Misawa Air Base, Japan, which flew more than 4,000 accident-free hours last year, has been awarded the Pacific Air Forces Flying Safety Trophy for 1960.

Vying with all other tactical units in PACAF for the flying safety award, the 4th Fighter Interceptor Squadron has operated without a flying accident since August of 1959.

The 4th FIS won the safety award despite adverse conditions such as severe winter weather, airfield construction activities, lack of suitable bad weather alternate fields, and conversion of the unit's aircraft from F-86Ds to F-102s.

Maj. Joseph W. Mejaski, operations officer of the 4th FIS, said, ". . . it was only through the combined efforts of the squadron pilots, maintenance personnel, as well as all support activities that this record could be achieved."

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SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. — ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.

Space Instrumentation Prepared For Launch In Navigation Program

An atmospheric geophysics research program which will put General Dynamics/Convair instrumentation into space for the first time has been extended over the next year under a recent Air Force contract.

Sponsored by the Office of Aerospace Research, USAF, the current contract, dated July 1, for the collection of data by a high-altitude rocket probe is an extension of the original contract issued a year ago to GD/Convair by Electronic Systems Division, AF Systems Command, Hanscomb Field, Mass., an agency of AFCRL. The combined programs will total nearly half a million dollars.

GD/Convair's infrared and optics technology laboratory is responsible for Convair's first infrared measurement program in space—one of the first such programs in the country using rockets as probes. Romuald Anthony, design specialist in charge of Convair infrared, optics, and ultraviolet technology section of engineering, forecasts that the present research program may well be a forerunner of other radiometric rocket sounding programs.

Primary purpose of the present program, explained Anthony, is to determine the suitability of using the edge of the horizon as a reference for space vehicle navigation instruments.

Tasks spelled out by the AF contract call for the collection and reduction of data on the infrared characteristics of the horizon as seen from high-altitude vehicles. To implement this program Convair is building an infrared radiometer to meet the specific data-gathering requirements. This radiometer designed and developed in Convair's infrared and optics section (based on a concept of Dr. V. N. Smiley, senior research engineer) will be installed in the nose cone of the Black Brant sounding rocket. The rocket will travel as high as 120 miles carrying Convair instrumentation aloft to measure and record the infrared gradient of the horizon.

The 27-ft. Black Brant rocket was developed by General Dynamics subsidiary, Canadair Limited. The nose cone will be sent to San Diego for installation and checkout of the instruments. The instrumentation package, weighing approximately 100 lbs. and containing a recorder, gyros, and spin control, will be placed with-

(Continued on Page 2)

Delta Orders $20 Million in New Aircraft

A new $20 million order for four more Convair 880 jet airliners was placed last week by Delta Air Lines, bringing to 16 the number of 880s in the Delta fleet.

The four ships will be delivered to Delta next year—one in June, two in July and one in August.

The 880 transaction was announced jointly, in Atlanta by C. E. Woolman, president and general manager of Delta Air Lines, and in San Diego by C. Rhoades MacBride, executive vice

(Continued on Page 2)



HEAD UP—Alaska Airlines Convair 880-M takes off from Lindbergh Field, after completing functional and reliability tests. Alaska will start daily service with aircraft this month, linking Seattle, Fairbanks, Anchorage.



MILESTONE—Airworthiness type certificate was issued by FAA for Convair 880-M last week, clearing way for five airlines to start scheduled passenger service. Presenting certificate facsimile to E. R. Peterson (center), GD/Convair vice president-research and engineering, is R. J. Bowers, FAA supervising inspector. At left is T. W. Sanford Jr., FAA coordinator for GD/Convair.

AA Delegation Studies Jet 990 During SD Tour

American Airlines 990s on the flight line at GD/Convair were the classroom setting for two groups of AA stewardess training specialists at the San Diego plant last week.

Giving the newest Convair jet transport the once-over were 20 AA key training personnel from all over the network.

Although coordinated and assisted in arrangements by GD/Convair customer service, the two-day briefings were conducted personally by H. L. Morava of AA, maintenance instructor from Tulsa, Okla., AA headquarters. R. B. Tingdale, AA manager of stewardess training and procedures, New York City, was in charge of the program. Jim Eschwege, GD/Convair special courses instructor, was responsible for meeting requirements of the visitors and liaison.

According to Tingdale, familiarization sessions within the 990 before it goes into service with American are one of the preliminary steps to set the full-scale AA stewardess training program into motion. Approximately 1,600 cabin attendants operating from 10 AA bases ultimately will receive training on the 990—its equipment, systems, and characteristics, and how they may differ from other jet transports now in AA passenger service.

At the San Diego plant were: Ellie Bradenbaugh, supervisor of stewardess procedures, N. Y.; Edna Garrett, procedure analyst,

(Continued on Page 2)

Birth of Naval Aviation Recalled by A-1 Replica

An effort spearheaded in part by General Dynamics executives and engineers has in one sense turned the clock of naval aviation back 50 years and in another afforded an opportunity to project and define naval aviation's role far into the future.

The "clock" will be going both ways when the National Naval Aviation Meeting is held Aug. 19-23 in San Diego, which will be dedicated as "the birthplace of naval aviation."

Among speakers during the conclave will be Navy Secretary James B. Connally Jr.; Adm. George W. Anderson Jr., who assumed duties as chief of naval operations yesterday; and Adm. James S. Russell, vice chief of Naval Operations, who is honorary general chairman of the meeting. Also present will be two other admirals and four vice admirals.

Co-sponsored by the Navy and Institute of Aerospace Sciences, the general chairman of the meeting and anniversary commemoration is James G. Wenzel, coordinator of anti-submarine warfare programs for General Dynamics Corporation.

During secret sessions, according to Wenzel, speakers will establish problems and objectives facing naval aviation in particular missions and throw discussion open to science and industry spokesmen. A final meeting will be a critical review and summary of material presented.

"It is believed this meeting will be one of great accomplishment," said Wenzel, "in which free exchange of ideas will form a foundation for reaching specific goals in years ahead."

Among those taking part in the secret sessions will be L. B. Richardson of General Dynamics Corporation (anti-submarine warfare meeting), and C. L. Blake, GD transportation systems development manager (co-chairman of logistics meeting).

Other GD/Convair and Astronautics men have filled important General Committee posts for the meeting. They include J. H. Famme, GD/Convair vice president-operations, who played a strong role in forming the initial technical concepts for the meeting; J. W. Hopkins (Convair Dept. 6), deputy general chairman and chairman of technical

(Continued on Page 3)

BEAVER ASSUMES BUWEPSREP DUTY

Capt. B. K. Beaver, USN, yesterday assumed duties at General Dynamics/Convair as Bureau of Naval Weapons Representative in San Diego. His offices are located on third floor, Bldg. 19.



Capt. B. K. Beaver

Captain Beaver reports to his new assignment from the Bureau of Naval Weapons in Washington, D. C., where for two years he was an assistant director of the Power Plant Division and most recently director of the Airframe Design Division.

Retiring from the Navy is Capt. R. L. Savage who has headed the San Diego office during the past year.

A native of Pennsylvania, Captain Beaver was graduated from the U.S. Naval Academy in 1940. After two brief tours of battleship duty, he was assigned to flight training and received his naval aviator's wings from Pensacola in 1942. During World War II he served with a patrol bombing squadron in the South Pacific.

In 1948 Captain Beaver received an MS degree in aeronautical engineering from Massachusetts Institute of Technology. He was technical director of the Aerodynamics Laboratory at the David Taylor Model Basin, Washington, D. C., before joining the Bureau of Naval Weapons.

880-M Earns FAA Type Certificate

A Federal Aviation Agency airworthiness type certificate for the Convair 880-M jet airliner was issued July 25.

The FAA "ticket" successfully concludes the nine-month 880-M flight test program and clears the way for start of scheduled passenger service with the 880-M by five airlines.

Final phase of the flight test program was the functional and reliability FAA flight test program in which an Alaska Airlines 880-M was flown on simulated airline schedules in the western United States.

FAA officials of the western region engineering and manufacturing branch said 880-M certification has been accomplished for operations at altitudes up to 41,000 feet.

"During the certification program, operation of the aircraft at 41,000 feet was accomplished on numerous occasions to check operation of equipment, as well as flight characteristics of the airplane under this extreme altitude condition," FAA reported.

Also pointed out in a news release issued by FAA was the fact that the 880-M "full span leading-edge, high-lift devices differ distinctly from standard jet aircraft in that they extend forward from the leading edge to form a slot and generate high speed air across the wing during takeoff and landing.

"This change helps facilitate operation from shorter fields, even at increased aircraft weight," they said.

The 880-M is an advanced version of the Convair 880 which has been in domestic airline service for more than a year.

(Continued on Page 2)



990 "CLASS"—First group of American Airlines stewardess training personnel at GD/Convair for briefings on 990 jet airliner line up beside AA craft at San Diego. Second group arrived middle of last week for two-day familiarization.

Improved 990 Weights Set

Better weights performance than planned in original designs was announced last week for General Dynamics/Convair jet transport versions.

Flight test performance shows the 990 will be certified for a landing weight of 202,000 pounds—an increase of 22,000 pounds. This means less refueling for the 990 on a series of medium to short-range hops.

The domestic 990 will have an increased maximum takeoff weight of 244,200 pounds, up from the original 239,200. This makes the domestic 990 maximum takeoff weight identical with the Convair 990 Coronado intercontinental version. Zero fuel weight has increased from original 154,000 pounds to 160,000 pounds.

Maximum landing weight of the basic 880 has gone from 132,800 pounds to 137,000 pounds. For the 880-M new maximum takeoff weight is 192,700 pounds, up 1,700 pounds; and maximum zero fuel weight, formerly 121,500 pounds, has been increased to 125,000.

Log Book Entries

Retirements

CONVAIR

BARNHART—Virgil R., Dept. 129. Seniority date June 15, 1951, retirement effective July 22, 1961.

GRAY—Wayne N., Dept. 3-1. Seniority date Nov. 27, 1955, retirement effective July 12, 1961.

MARABLE—Will T., Dept. 25-2. Seniority date June 4, 1956, retirement effective July 20, 1961.

NELSON—Alexander M., Dept. 133. Seniority date Sept. 23, 1947, retirement effective July 17, 1961.

PEER—Floyd A., Dept., 223. Seniority date Aug. 9, 1950, retirement effective July 17, 1961.

SIGNORELLI—Anthony T., Dept. 148. Seniority date May 14, 1956, retirement effective July 21, 1961.

SUGG—Maxey M., Dept. 401. Seniority date Aug. 13, 1953, retirement effective May 20, 1961.

Personals

CONVAIR

I am most grateful to my Convair friends for the kindness shown in so many ways during my recent illness.

James A. Campbell, Dept. 6.

* * *

The kindness and sympathy displayed by Convair friends at the death of Thomas D. Freeman, Dept. 133, is deeply appreciated.

Mrs. T. D. Freeman and Ronald.

* * *

I wish to express my sincere appreciation to Convair friends for their kindness when I lost my mother.

Frances Stingley, Dept. 16-9.

* * *

We wish to express our sincere appreciation to all of our friends at Convair, especially in Depts. 141 and 160, for the many kindnesses, expressions of sympathy, and flowers at the death of our wife and mother.

H. R. Papke (Dept. 141) and Family.

Promotions

CONVAIR

Promotions to or within supervision efective July 17.

Dept. 4-0, Material Office & Administration: To procurement manager, L. A. Wood.

Dept. 34, Material Procurement: To general purchasing agent (34-1), W. H. Parry; (34-2), M. Formanek.

Dept. 140, Pod & Pylon Assembly: To general foreman, G. H. Wilson.

Births

CONVAIR

DENNIS—Daughter, Kimberly Deann, 6 lbs., 14 oz., born May 21 to Mr. and Mrs. Gene W. Dennis, Dept. 179.

HERRMANN—Son, Michael, 6 lbs., 11 oz., born July 22 to Mr. and Mrs. Robert B. Herrmann, Dept. 16-3.

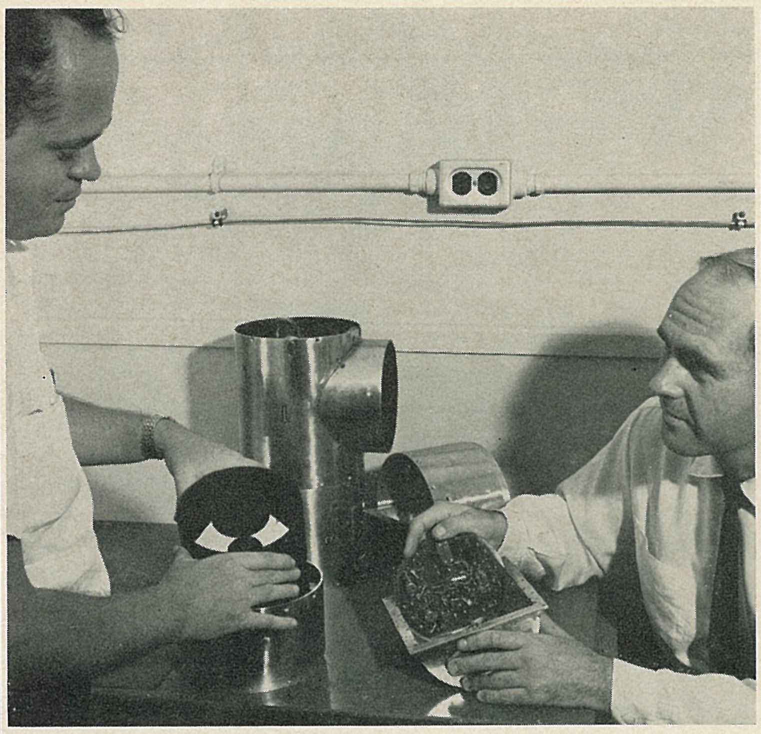
GD/ELECTRONICS

BRYAN—Son, David Joseph, 7 lbs., 12½ oz., born July 7 to Mr. and Mrs. Mike Bryan, Dept. 6.

Deaths

CONVAIR

HOUCK—Walter R., Dept. 99, (formerly Dept. 401). Died July 14. Survived by wife, Mary; father; son, James Ronald; daughter, Norma Jean Birdsell.



GETTING READY—Dr. V. N. Smiley and R. J. Condon of GD/Convair infrared and optics look over parts that assemble to make up radiometer for high-altitude probe.

No-Hitter Thrown By GD/Convair Son

Convair son Larry Shuck threw a no-hit, no-run game July 15 against Wytheville to give Johnson City a 5-0 win in the all-rookie Appalachian League.

Recently given a bonus contract to sign with the St. Louis Cardinals, the 19-year-old pitcher is the son of Ralph Shuck (Dept. 215).

Shuck faced only 28 batters during the game, striking out seven, walking four. Only four balls were hit to the outfield.

Delta Orders Four More 880 Liners

(Continued from Page 1)

president of General Dynamics.

Delta presently operates a fleet of nine 880s with three more on the assembly line to be delivered in September and October of this year.

The airline said the new order will help meet equipment needs of its network which was enlarged in June by addition of a Southern Transcontinental route connecting Los Angeles and San Diego with Fort Worth, New Orleans and Atlanta.

At present Delta flies 880s a total of 54 hours and 40 minutes a day, averaging 95 per cent departures without mechanical delays.

The new jets will have an all-first class interior and 12-place lounge for a total of 84 passengers. The Delta 880s are the only all-first-class jet airliners.

The Delta purchase brings the total GD/Convair jet transports delivered or on order to 114.

Divisions Appoint VPs at Astro, FW

New appointments at other General Dynamics Divisions include:

M. L. Hicks, vice president-legal and procurement and J. T. Cosby to vice president-program director-B-58/TF-X, both GD/Fort Worth.

W. H. Patterson to vice president-advanced product planning at GD/Astro. Also at Astro four program directors were named: George M. Robertson, management systems; Charles S. Ames, Saturn S-1; William Van Horn, Atlas; Dr. Andrew Kalitinsky, Apollo.

SPACE 'PACKAGE' PREPARED AT SD

(Continued from Page 1)

in a recoverable pod inside the 10½-ft. nose cone. During flights it will record signals on tape for later evaluation. First firings will be scheduled at Fort Churchill, Manitoba, early next year.

The original program calls for similar horizon measurements by a GD/Convair-built radiometer to be carried "piggy-back" on an Atlas ICBM flight. This flight is expected to be made toward the latter part of this year.

Lead engineer on the current program is R. J. Condon who said that two types of radiometers will be constructed as part of the instrumentation program. Three rocket firings are anticipated, he said, in the measurement of infrared radiation from the earth's atmosphere.

AA Delegation Studies Jet 990

(Continued from Page 1)

N. Y.; Betty Jeffrey, Alice Markham and Dorothy Fairly, supervisors of stewardesses, N. Y.; Betty Blatt, Washington, D. C.; Peggy Warren and Jo Sinclair from Chicago; Anita Andreen, N. Y.; Harriett Hendersen and Jean Parker, Dallas; Kay Avery and Judy Kiernan of Los Angeles; Margaret Heulett and Nancy Nichols, AA Stewardess College, Fort Worth.

Besides Tingdale and Morava, others of the male contingent included T. W. Brooks, director of cabin service, N. Y.; J. C. Chellis, supervisor of ramp services, N. Y.; F. C. Bonner, manager of stewardess service, N. Y.; J. Snigg, cabin service, N. Y.; Paul Bishop, W. Bock, and C. Nixon, managers of stewardesses at N. Y., Chicago and Los Angeles respectively.

Executives Attend Installation Of Antelope Valley Club Slate

EDWARDS RS — New officers of General Dynamics Management Club in the Antelope Valley were installed at a June 30 fete at the Antelope Valley Country Club.

Ed Mastaglio heads the slate as president. Others include Roy Kurtzman, vice president; Joe Belcher, secretary; and Bill Armann, treasurer.

J. J. Janda of GD/Astro, NMA Zone A director, served as installing officer.

Among honored guests were Mort Rosenbaum, executive vice president, GD/Astronautics; W. W. Withee, vice president-research and engineering, GD/Astro; Phil Prophett, manager of base activation, GD/Astro; Joe Famme, vice president-operations, GD/Convair; W. F. Miller, assistant chief engineer-test, GD/Astro; and Bob Phelps, assistant to C. Rhoades MacBride, executive vice president, General Dynamics.

Following dinner, dancing to the music of the Chord-Aires was featured.

Rosenbaum and Famme were principal speakers.

MANAGEMENT CLUB MEMBERS WILL TOUR NORTH ISLAND NAS

Members of General Dynamics/Convair Management Club will spend a day with the Navy on Aug. 12 when they tour North Island Naval Air Station.

Trip highlights will include a visit on board an aircraft carrier, a tour of the air station by bus, and a "scramble" conducted by all-weather fighter squadron VFAM-3.

Attendance is limited to members only. Tickets, priced at $2 each, are on sale now at all club outlets. Departure will be at 9 a.m. from the Plant 2 parking lot on San Diego Transit Company buses.

The timetable calls for members to board the carrier at 10 a.m. and after a noon lunch tour the island naval facility. Buses will leave at 3 p.m. and return to Plant 2 parking lot. Cameras will be permitted.

Fabrication departments at Plants 1 and 2 are sponsoring the event under co-chairmen R. D. Gowdy, G. K. Cox and R. A. Davis.

Children Restricted At Salvage Yards

Children under 16 may not be taken into GD/Convair or GD/Astro salvage yards during employee sales hours, warned Ray Lange, material sales supervisor at GD/Convair.

Because of risk of injury, families are urged to leave small children home when visiting either of the yards.

Schedule for the next four weeks is:

GD/Convair—Aug. 5 and 19.
GD/Astro—Aug. 12 and 26.

Barinka and Martin In New Locations

New office locations have been announced for three GD/Convair officials.

S. J. Barinka, assistant factory manager; W. J. Martin, manager of quality control; and J. I. Luckett, superintendent of manufacturing control, now are located in Bldg. 33, in the northeast corner near Cols. C-12 and C-13.

Phone extensions are: Barinka, 1022/1337; Martin, 697/698; and Luckett, 2917/2163.

880-M Earns FAA Type Certification

(Continued from Page 1)

Airlines which will use the plane in commercial service are Civil Air Transport, flag carrier of the Republic of China; Viasa of Venezuela, Japan Air Lines, Alaska Airlines and Swissair.

In comparison to the 880, the 880-M has added fuel capacity and range, four General Electric CJ-805-3B engines with increased thrust—11,650 pounds each—and an increased maximum takeoff weight of 192,700 pounds.

Stromberg-Carlson Consoles on Display

Four new models of Stromberg-Carlson stereophonic consoles are now on display at GD/Convair employee services, Bldg. 32, Plant 1.

All are models of the new economy line, "Young America," and may be purchased at discount prices by General Dynamics people. Full price information is on hand at employee services.

Daingerfield Now Pomona Division

Daingerfield, Tex., test facilities last month were made a division of General Dynamics/Pomona under the supervision of C. F. Horne, Pomona Division president.

The development facility, in operation since 1945, is operated for the Bureau of Naval Weapons, under the technical direction of the Applied Physics Laboratory, The Johns Hopkins University.

C. Rhoades MacBride, General Dynamics executive vice president, said there will be no change in scope or method of operation. J. E. Arnold continues as manager.

Daingerfield is located on the shores of Lone Star Lake in East Texas, about 150 miles east of Dallas. GD personnel number about 260.



HARVEST—Fine composition and profound symbolism mark this photo shot in Kansas field by Astro Lensman Dave Mathias. In background is Forbes AFB Atlas site. And over that slight rise, as any nostalgic Middle Westerner knows, are endless acres of wheat stretching to the horizon, swirling and rippling in a hot summer breeze.

★ Convairiety ★

Founded Sept. 1, 1948. Published in six editions (Fort Worth-Daingerfield, Convair (Palmdale-Holloman), Astronautics, Astronautics Off-Site, Pomona and the Mail). Logan Jenkins, editor-in-chief.

Approximate current total circulation, over 70,000. News items and letters to the editor are solicited, but no advertising can be accepted.

SD Editorial Offices, Building 32, Plant 1, ext. 1071. Staff: Fred Bettinger, news editor; Grayce Fath, Helen Pemberton.

Astronautics Editorial Offices, Bldg. 8, Astro site, ext. 3322. Staff: Bryan Weickersheimmer, news editor; Willard Harwood.

FW Editorial Offices, Col. 72, Administration Bldg. Mailing address: Convairiety, GD/Fort Worth, Texas. Telephone PErshing 8-7311. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck. Mail zone 0-50.

Pomona Editorial Offices, Room 106-D, Bldg. 1, ext. 6226/5279, mail zone 3-3. Staff: James Combs Jr., news editor; Dorothy Keller.

Palmdale news representative, CRA office, Room 36, Bldg. 301B, ext. 331, Palmdale facility. Holloman: O. J. Ancel, industrial relations, ext. 20, Holloman AFB.



ANNUAL REFRESHER—Nearly two score from GD/Fort Worth spent long Saturday last month to refurbish B-36 Memorial at Carter Field. Giant bomber, retired in 1959, has been constant source of pleasure to visitors. Volunteer painters are shown about to chow down.

Volunteers Labor 6:45 a.m. to 6 p.m. To Cover B-36 With 60 Gals. of Paint

Volunteers at General Dynamics/Fort Worth sprayed about 60 gallons of paint—enough to cover about nine frame homes—on the B-36 Memorial at Carter Field Saturday, July 15.

Thirty-five hourly and salaried volunteers spruced up the giant Peacemaker inside and out. The project is annually conducted by Management Club's B-36 memorial committee, with Sam Keith as chairman.

"It was a fast and clean job," said B. R. Main, project coordinator. "Kept in its present well-preserved condition, the B-36's importance as a memorial of its time will be enhanced in years to come."

With Air Force permission, the famed Peacemaker — No. 383 — was memorialized at Carter Field in 1959. Since that time an estimated 150,000 people have visited the six-engine bomber.

Main reported that visiting hours—from 2 to 6 p.m. Saturdays and Sundays—would continue throughout the summer. The memorial is open for tours on special occasion by special arrangement with the B-36 committee.

Volunteer workers started the painting job about 6:45 a.m. and didn't call it quits till all painting was finished at about 6 p.m.

A total of about 35 gallons of aluminum paint, 15 gallons of white paint and several gallons of red and blue paint were used on the B-36, which measures over 162 feet in length and has a wing span of 230 feet.

All lettering on the memorial, plus the red, white and blue SAC insignia were also painted.

Individual Traveling Insurance Now Available on Annual Basis

Individual travel insurance covering both personal and business trips on any type of conveyance may now be purchased by General Dynamics employees of former Convair divisions on an annual basis.

Offered through General Dynamics' regular insurance broker, this service replaces the sale of individual trip accident insurance which has been discontinued due to lack of interest.

Under the new plan, rates for individual travel insurance are $1.50 per $1,000 of coverage for death only. For an additional 75¢ per $1,000, permanent and total disability benefits may be added. Thus, $2.25 per each $1,000 of coverage provides death, permanent and total disability protection. Rates are annual.

Coverage is not compulsory but is offered as a service to GD employees. It has no connection with company-provided insurance for employees traveling on official company business nor the employees' group insurance program, both of which continue in effect.

Applications for travel insurance may be obtained through general accounting departments at each GD operating division. Astronautics off-site personnel may obtain forms through the Astro general accounting department, mail zone 190-0.

Each application must be accompanied by a check for the amount of coverage desired, made payable to the applicable GD division-General Dynamics/Astronautics, General Dynamics/Fort Worth, etc.

Questions should be directed to general accounting departments at each GD division.

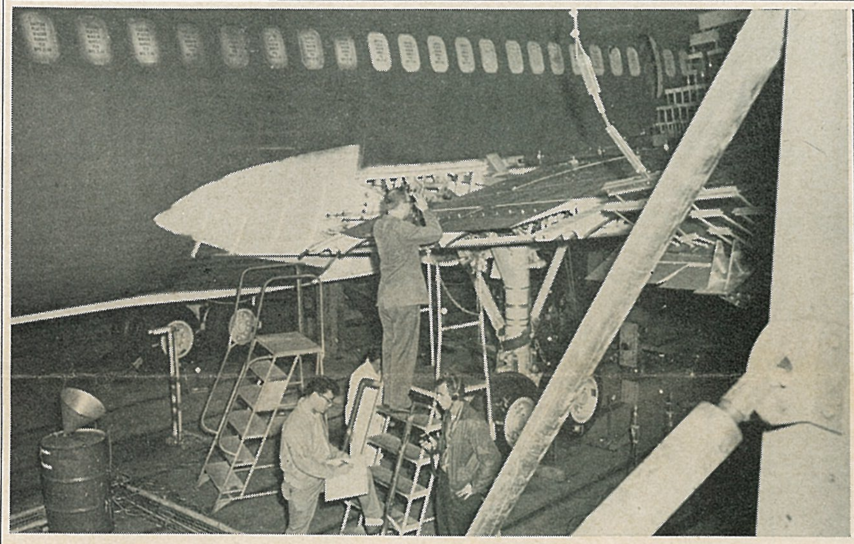
Engineering Review Classes Scheduled

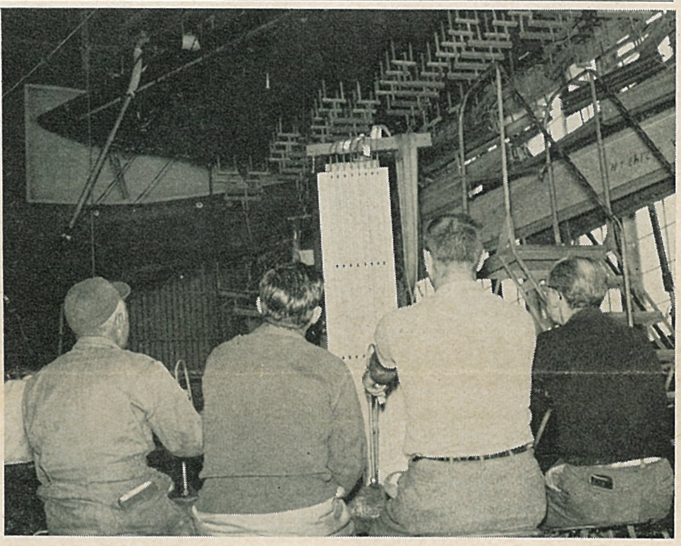
General Dynamics engineers in the San Diego area who are planning to take state board examinations may enroll in engineering review courses started by U. of Calif. Extension.

One section began Aug. 1 with a second section of the 15-session course opening tomorrow (Aug. 3). Meetings are held in Roosevelt Junior High School. Instructor is J. B. Herreshoff, GD/Convair design specialist.

Subjects reviewed will include mathematics through calculus, statics, dynamics, strength of materials, fluid mechanics, thermodynamics, chemistry, electricity, and economics.

Information may be obtained through the University Extension office, 1221 Fourth Ave., SD.





STRESS AND STRAIN—Proof loading of Convair 990 has come to close at San Diego. At left A. B. Carlson, former structures test lab engineer, uses binoculars to read deflections of indicators during wing stiffness as S. D. Santos, Dept. 68, records readings while F. W. Starkey (with headphones) communicates with test conductor. At right, foursome manipulates pressure valves during horizontal tail proof, adjusting to readings on water manometer board, at structures test lab, SD seaplane ramp.

Birth of Naval Aviation Recalled by A-1 Replica

(Continued from Page 1) program committee; W. D. Logan (Convair Dept. 6), secretary of general committee and chairman of hospitality committee; R. T. Blair Jr. (Astro Dept. 120), chairman of social activities committee.

Still more GD men have put effort and planning of another sort into a project which takes naval aviation back 50 years—to its very beginning.

Reborn again to commemorate the Golden Anniversary is a replica of the Curtiss A-1 seaplane which inaugurated naval aviation in 1911.

For the past two years GD/-Convair and Astronautics engineers, along with other industry and Navy leaders have been working on the project.

Design for the replica was re-created from pictures and records, and accounts of observers who had seen the first A-1. Construction materials were supplied by some 20 industrial firms throughout the country and no less than 60 GD engineers and craftsmen were among some 180 workers throughout the area who contributed generously during their spare-time hours to this recreation of the past.

First test flights of the replica were made July 11 over South San Diego Bay by Don Germeraad, chief GD/Convair engineering test pilot. He will be at the controls again during an air show which will be a prelude Aug. 19-20 to the National Naval Aviation Meeting.

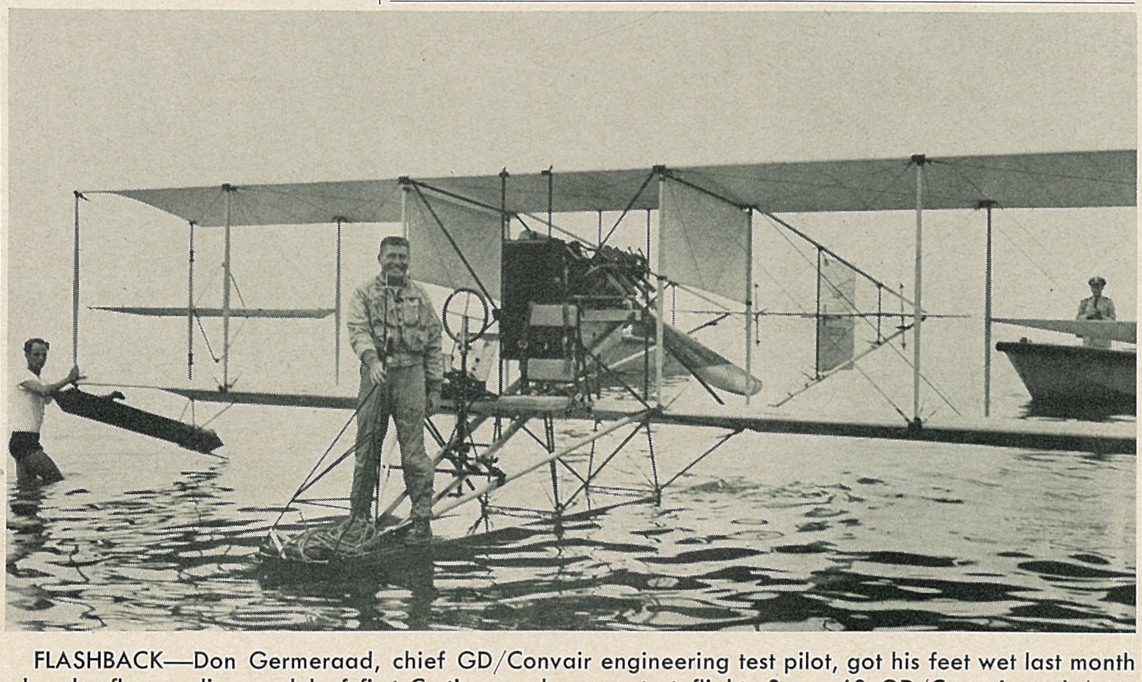
Among GD people who have contributed to the A-1 project are Chase Allen, Jack Jenson, floats; C. E. Beddoes, weights; V. A. Carlson, project engineer; W. D. Logan, administrative engineer; Stan Piszkin, W. B. Weber, aerodynamics report; Mrs. Terry Vasques, dynamics report; A. B. Oberg, J. E. Turner, manufacturing; Bob Walacavage, sheet metalwork; B. C. Wollner, stability report; D. L. Trusk, component construction.

Journalism Chapter Elects Loyd Turner

Loyd L. Turner, special assistant to the General Dynamics/Fort Worth president, is the newly-elected president of the Fort Worth Chapter, Sigma Delta Chi. The organization is a professional journalism fraternity.

Malcolm Holloway, administrative assistant in Dept. 2-5, is a director of the chapter.

Turner, who has served previously on the fraternity's board, has been a key committee chairman annually in connection with the chapter's "gridiron" show.



FLASHBACK—Don Germeraad, chief GD/Convair engineering test pilot, got his feet wet last month when he flew replica model of first Curtiss seaplane on test flight. Some 60 GD/Convair and Astro engineers played part in helping recreate model of seaplane which inaugurated naval aviation in 1911.

990 Withstands Stress Of Lengthy Load Test

Proof loading of Convair 990 plane No. 3 has reached its conclusion after a several-month program at General Dynamics/Convair's structures test laboratory at the San Diego seaplane ramp.

The plane will move home to Plant 1 some time this week for updating.

"The entire structural testing program was accomplished with most satisfactory results," said A. R. Vollmecke, assistant group engineer in charge of jet transport structures tests. "No part of the testing had to be repeated due to structural weakness of any kind."

Since going into the big structural test lab building last December, plane No. 3 has paced flight testing of 990 jet transports. Before the first 990 took to the air early this year control systems and surfaces were proof loaded and put through complete operational tests while under load to prove that the plane was absolutely safe structurally.

Various steps of the structures testing were dovetailed into the flight test schedule, keeping ahead or abreast of actual testing in the air of corresponding functions. Pylons and wings were subjected to stiffness tests to check out theoretical analysis by design engineers.

Proof load testing of control systems and surfaces, horizontal tail, and wing trailing edge flaps was observed by Federal Aviation Agency representatives for certification. The vertical stabilizer, anti-shock body, main and nose landing gears were proof loaded in separate fixtures so that testing projects could be carried on simultaneously, explained Vollmecke. Proof loading of leading edge flaps was done on the 880-M plane.

During the last few weeks the 990 has been kept at the structures test laboratory for re-evaluation of improvement changes incorporated during flight test.



SOFT TOUCH — When heavy rains threatened to wash out nest of scissortails near his post, Grady Starr, industrial security guard at GD/Fort Worth, came to rescue. He bought "house," anchored it atop fence. First fledglings have already flown out, more little ones are on way.

Battle Fatigued? Atom Engineer Suggests Orchids Are Relaxing

Kelly Spearman, engineer in charge of GD/FW's nuclear instrumentation lab, suggests the answer he has found to noise-fatigue. Grow orchids and camellias.

"Greatest therapy I know," says Spearman. "I can spend an hour or so with my plants, then be able to listen to any type of commotion."

Spearman, who has a rare orchid plant in his home greenhouse he values between $300 and $400, started growing camellias for relaxation when he was still attending college.

He found it made wrestling logarithms and complicated formulas easier. When he was at the University of Texas, he had 40 camellia plants, growing in cans, in his room.

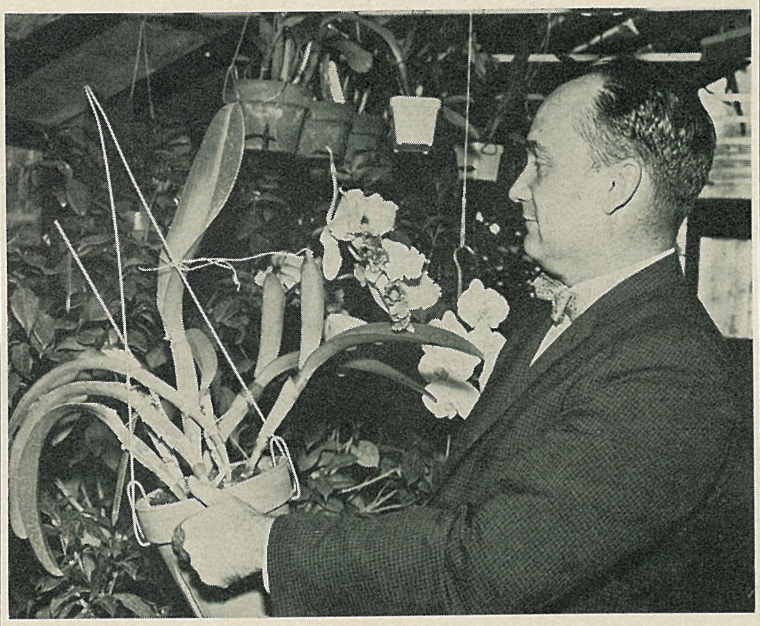
Spearman never thought much about flowers until 1946. He was attending the University of Alabama at the time, and "just happened" to visit a flower show.

Spearman imports many of his orchid plants direct from Hawaii. They grow in fir bark, without soil. He feeds them liquid fertilizer each two weeks.

Spearman received his Ph.D. in physics from the University of Texas in 1954.



NEW RANK—C. Rhoades MacBride (right), executive vice president of General Dynamics, last month was made "Admiral of the Flagship Fleet," an honorary title bestowed by American Airlines on those who have made contributions to development of air transportation as a public service. Presenting plaque is D. D. DeWeese, AA sales manager in San Diego.



GARDENER — Kelly Spearman, engineer in charge of FW's nuclear instrumentation lab, finds growing orchids and camellias in his own greenhouse relaxing hobby.

Glib Orator

Young Speaker Wins Honors in Nine Tourneys

A General Dynamics/Convair son is rapidly building for himself a reputation as a terrific talker.

During the past year Carl V. "Bud" Carey Jr., 16-year-old son of C. V. Carey (Dept. 401-4) has won honors in no less than nine speech tournaments — local, regional and national.



Carl Carey Jr.

About the only opportunity young Carey has had to catch his breath has been at awards ceremonies when someone else does the talking. So far Carey has collected nine trophies and a boxful of ribbons and medals.

Highlights of the young speaker's career include the San Diego State College Open Tournament at which Carey placed second in impromptu, first in original oratory, first in extemporaneous, and won the outstanding speaker's award.

Also among Carey's laurels are a second in impromptu and first in extemporaneous at the National Forensic League District Tournament at University of Southern California and third in impromptu at California State Finals at University of California at Santa Barbara.

In addition to tournament talkathons, campaign oratory must also come easy for Carey. He's been elected president of the 1962 senior class at Mt. Miguel School.

Convair-Built Jets Scramble In Mock Combat Operation

Minot Air Defense Sector (SAGE), to which Convair F-106s are attached with the 5th Fighter-Interceptor Squadron, is now classed as an "Operational Unit" involved in air defense of the North American continent.

Commander of the Minot Air Defense Sector is Col. James O. Beckwith who controls an organization encompassing Minot AFB and long-range radar sites in North and South Dakota, Wyoming, and Montana.

F-106s were scrambled in an Operational Readiness Inspection in June when every kind of an emergency was thrown into the mock combat situation testing the Defense Sector's readiness, said D. W. St. Pierre, Convair field service rep at Minot AFB.

Convair jet interceptors with the 5th FIS, also scored an almost perfect record during recent maneuvers at Tyndall AFB, Fla.

St. Pierre also reported the awarding of a certificate of meritorious achievement to the 32nd CAMRON (maintenance squadron) for an accident-free year ending March, 1961.

J. D. Outenreath's Son Wins Fellowship

James Donald Outenreath Jr., son of J. D. Outenreath, FW Dept. 34, has been awarded a three-year university fellowship by the U. S. Commissioner of Education.

Young Outenreath attended TCU on a GD scholarship and received a B.A. degree last spring. He will continue studies at TCU toward a Ph.D. in physics.

Sauce for the Gander! Forms For CIPs and ESs Simplified

Forms for submitting Employee Suggestions and Cost Improvement Proposals will get a "new look" starting Sept. 1.

The new General Dynamics/Convair forms will be considerably simplified—all information required is listed on two sides of a standard-size sheet of paper. Forms now are twice as large.

C. H. Hahn, assistant supervisor of cost reduction, announced the new format as part of a general cost-reduction program within his own operation.

He said the improvement extends beyond the ES and CIP submittal forms. New, simplified inquiry forms will also expedite the processing of ESs and CIPs.



NEW LOOK—Betty Ann Wood (left) and Joan Roberts, both of Dept. 8-4, display old and revised Employee Suggestion forms. Under new plan, GD/Convair cost-cutters need fill out only two sides of one page when submitting ESs and Cost Improvement Proposals.

Film on Communism Shown at Lunchtime

A movie based on the steady advance of communism throughout the world is being shown in General Dynamics/Convair auditoriums this month.

GD/Convair people may see "Communism on the Map" during lunch periods on the following schedule: Aug. 3, engineering auditorium, 12:30-1 p.m.; Aug. 9 and 16, Bldg. 14 auditorium, 11-11:30 a.m.; Aug. 23, Bldg. 14 auditorium, 11:45 a.m.-12:15 p.m.

Eating is permitted in the Bldg. 14 auditorium, but not in the engineering auditorium, Bldg. 5.

Presentation of the film is sponsored by industrial security department. The film was provided through the efforts of educational services.

GD/FW Son Selected For Recruit Honors

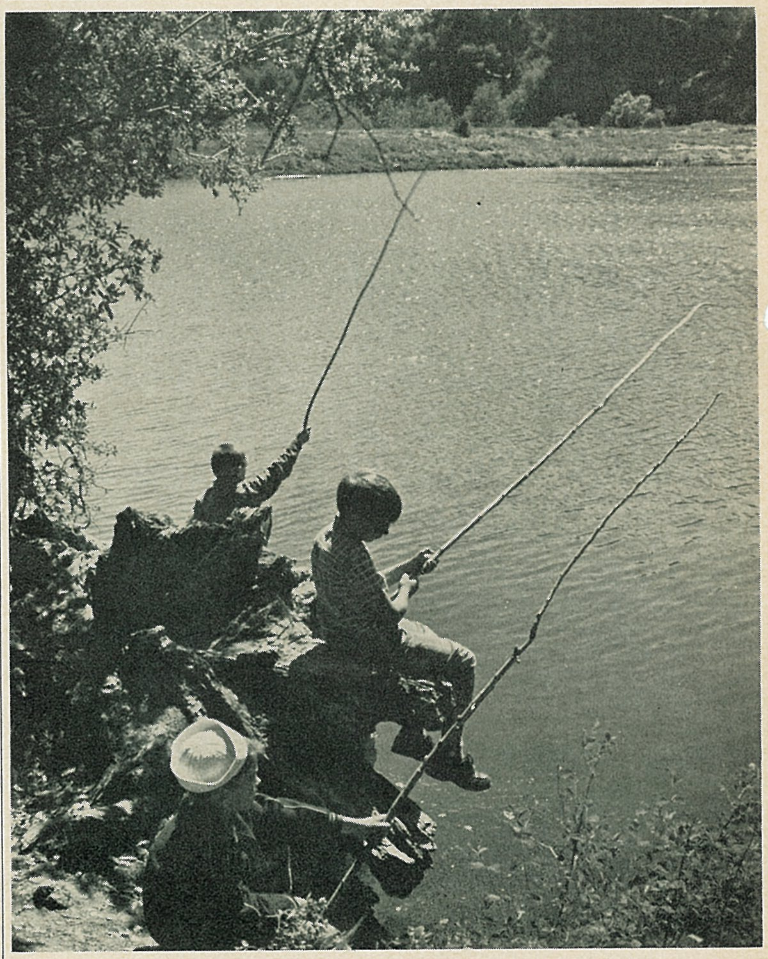
Gary C. Burton, son of a General Dynamics/Fort Worth man has been named "Outstanding Reservist" aboard the USS Wiseman, a destroyer on which he recently completed two weeks' duty in the Pacific.

Burton, 19, is the son of Mrs. Edna A. "Ginger" Robertson, key puncher verifyer in Dept. 19-3.

Burton is a seaman recruit in the Naval Reserve Surface Division 8-85(M). He will enter active service in the Navy in November.



IRELAND'S LOSS—When GD/Convair's Joe Bradshaw gained his U. S. citizenship last month, associates went "all out" in celebration, doubtless reflecting his personal popularity. Roy Benstead authored rhyme for occasion, thus becoming Dept. 6-04 "poet laureate."



AH YOUTH—Moving mood study brings to life carefree boyhood days in this photograph made by GD/Convair's H. M. Harvey (Dept. 6). Boy at top of photo is Harvey's seven-year-old son, Bill. Location is YMCA camp pond in Julian, Calif.

General Dynamics News

Frank Pace Appointed To Intelligence Board

Frank Pace Jr., board chairman of General Dynamics Corporation, last month was appointed by President Kennedy as a member of the President's Foreign Intelligence Advisory Board.

Pace, a former Secretary of the Army (during Korean hostilities), succeeds Gen. Maxwell D. Taylor who has been chosen as the President's military representative in the White House.

Dr. James R. Killian Jr., is chairman of the advisory board which keeps watch over the intelligence-gathering functions of the government. These include



CHOSEN—Frank Pace Jr. last month was selected by President Kennedy for post on key federal intelligence board.

CIA and some 30 other intelligence units, including those serving the armed forces, the State Department, the AEC and some units of the FBI.

Pace has served the federal government in a number of top posts, including special assistant to the attorney general, executive assistant to the postmaster general and director of the Bureau of the Budget. During 1950 he was chairman of the Defense Ministers Conference of NATO.

* * *

Twelve officers of the Army, Navy and Air Force are undergoing training at San Diego with a unique type of atomic reactor which the Department of Defense will use to test the biomedical effects of intense nuclear radiation.

The specially-selected officers, who are attending daily classes at the TRIGA reactor center of General Atomic Division, will form the cadre of the staff of the new Armed Forces' Radiobiology Research Institute which is under construction at the National Naval Medical Center in Bethesda, Md.

RAdm. Courtney Shands, Deputy Chief of DASA, opened the course and told trainees that they will be contributing to advanced research of a broad nature including the treatment of diseases "in the interest of our national welfare and the good of mankind."

During the 19-week course the officers of the three services are using General Atomic's operating prototype of the new-concept TRIGA Mark-F "pulsing" reactor to be installed as the primary research tool of the institute. Each of the 12 officers holds a master's degree or doctorate in science, engineering or mathematics, and several have had nuclear experience.

* * *

A portable, self-regulating atomic power plant to generate electricity beneath the surface of the sea or in remote land areas of the world without requiring any operating personnel is being developed.

The small "package" plant, capable of long-term, unattended operation at generating capacities up to 2,000 electrical kilowatts, is under conceptual design and development at General Atomic Division.

Dr. Frederic de Hoffmann, president of the division, said a version of the completely automated plant would be applicable to undersea operation as a power source for naval defense systems. On land, the small power plant might be used to provide electricity for military, weather or communications stations in polar regions.

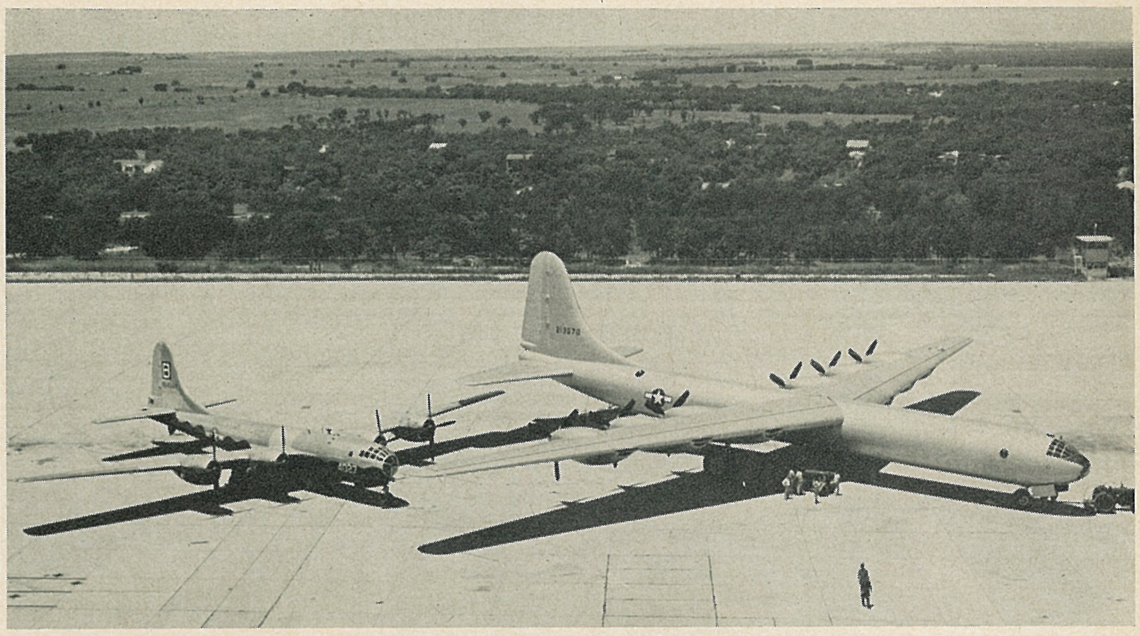
* * *

The biggest missile submarine ever built and the first designed to fire the longer-range 1,500-mile Polaris will join the Navy Aug. 8.

She is the 6,900-ton 410-foot Ethan Allen, scheduled for commissioning at her General Dynamics dock in Groton, Conn., as the first ship in an entirely new class of Polaris submarines.

Carrying 16 Polaris launching tubes in a midships compartment and the latest in equipment, the Ethan Allen will have gone from keel-laying to commissioning in less than 23 months.

The Ethan Allen is the 10th atomic submarine built by Electric Boat Division and the 20th to be commissioned by the Navy.



DWARFED—First of giant B-36s, pictured on ramp at Fort Worth, dwarfs veteran wartime bomber, B-29 Superfortress.

Wartime Demands Delayed XB-36; Production Planes Given Priority

(Installment No. 64 of a continuing history of Convair aircraft summarizes early problems with XB-36.)

The original delivery dates for the XB-36 had been May and November, 1944, but these were not met for many reasons. Early design was slowed by revision of the Air Force's armament requirements, a shift from twin to single tail configuration, and problems of weight and balance control. Higher priorities given aircraft already in production deferred wind tunnel tests, and delay was encountered in development of the new Pratt & Whitney R-4360 Wasp Major engine, a 28-cylinder giant that weighed 1¾ tons and developed a hitherto unheard of 3,000 horsepower. The most persistent problem, however, was assignment of low manpower and material priorities to the XB-36 program until late in the war.

Thus a contract for 100 B-36s was awarded Aug. 7, 1943, but construction of the experimental building in which the prototype was to be built did not start until September. Fabrication gained speed in 1944, and in October the Air Force approved construction of the 8,200-foot runway the bomber would need. Before hostilities ended, Air Force studies had picked the B-36 as the plane around which the post-war air arm should be built.

Sheer size was the bomber's most distinctive feature; one pilot likened the experience to "sitting in the bay window and flying an apartment house." From a design standpoint, however, the greatest novelty was the use of pusher propellers, seldom employed since the earliest days of aviation. The reasons for this configuration were two (one trivial), and the consequences were three (one bad).

When the original design was laid out in 1941, an NACA "laminar flow" wing section was adopted. This was a comparatively recent airfoil, developed to maintain a perfectly smooth air flow across wing surfaces. Since propellers and engine nacelles created local turbulence, it was decided to locate them aft in the B-36. A secondary consideration, engineers conceded in later years, was the appeal of a platform that was "different."

The first benefit of the design was discovered when the XB-36 started flight-testing in 1946. The plane proved to have better climbing capabilities at high altitudes than designers had predicted. This would be of great importance over the next ten years. "High" meant 35,000 feet when the B-36 was born; in the race for upper-atmosphere supremacy she would have to learn to fly above 50,000 feet.

The second benefit of having power plants aft was this: If an engine caught fire, flames streamed out behind the plane instead of burning like a blowtorch against the wing. In practice it was found that an engine could blaze away until it burned free and fell from a B-36, yet the bomber could still come home.

On the debit side, the propellers created a vexing vibration problem. At the top and bottom of their 19-foot arc the tips passed through clean, high-speed air, but in the plane of the wing's trailing edge the blades crossed through a zone of slow, turbulent slipstream. This set up strong vibrations throughout the trailing edge area. Engineers who entered the wing aloft to study the phenomenon under flight conditions found that vibration numbed their feet.

The problem this created was one of metal fatigue—the cracking of light aluminum and magnesium parts subject to vibrational flexing. Since the vibration had to be accepted, fatigue was combated with many small design changes. One type of fabrication that proved especially resistant employed Convair's patented Metlbond process, in which a rubber-base adhesive is applied between surfaces and set under pressure and heat. In such secondary structures as stiffening panels, this "spreads the stress" instead of concentrating it along rivet attachment lines.

Production models started coming off the line in August, 1947, delivered without armament as familiarization trainers. The first service delivery was made the following June to the Seventh Bomb Wing at Carswell. On Dec. 7-8 a Carswell B-36 established its range with a simulated mission to Hawaii, flying 9,600 miles nonstop and dropping a 10,000-pound load en route home.

Industry Practice and AF Procedure Reconciled During Year-Long Tours

Another team of Air Force officers has completed its year in Education-with-Industry at General Dynamics/Convair.

Maj. Jack H. Thacker and Capt. Henry H. Conner Jr. are reporting for new assignments following a tour of duty at the division. Major Thacker will be attached to the deputy chief, buying division, Hdqrs. Air Materiel Force, European Area, Chateauroux, France. Captain Conner is based now at Ogden, Utah, with production procurement division, Hdqrs. Ogden Air Materiel Area, Hill AFB.

Since GD/Convair entered the Education-with-Industry program in 1956, two Air Force officers have come each year to learn the details of the company's operations on the spot. (GD/Fort Worth was the first company division to join the Air Force program. So far, 11 groups of AF officers have been based at the Texas plant. Astronautics has participated the last two years.)

Other officers who have chosen GD/Convair for their familiarization with an aircraft industry are Lt. Col. J. N. Raymond, Maj. (now Lt. Col.) Louis M. Van Der Beek, Maj. Harold Wanfried, Maj. Gordon Palmer, Maj. (now Lt. Col.) Kenneth B. Gorton, Capt. Thomas O. Townes.

All are production procurement career officers carefully selected by AF Institute of Technology, Wright-Patterson AFB, Ohio, for the executive development program. Value of the joint AF-industry program is principally the exchange of first-hand information and the opportunity to learn and observe operations and business practices of industry. In return, companies receive the same detailed information on AF procedures.

In many cases, AF officers have been able to pinpoint ways in which companies can improve methods or cut costs, or better comply with AF requirements.

According to Mark Saunders Jr., who has administered the program under educational services since its inception at GD/Convair, the cooperation of all executives within the company has added immeasurably to its success.

During their year with GD/Convair, the AF men become a part of the company—with full executive privileges and complete freedom of the plant; access to all areas and information within the company. Although their attention is directed mainly to material—its procurement and handling, their time is apportioned so that they can make the rounds of all departments and factory areas, spending a week or two in each.

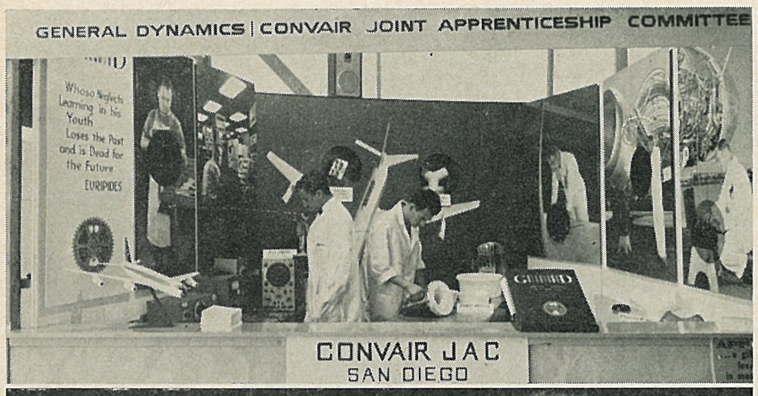
GD/Convair will be welcoming a new pair of AF officers into the company next month.



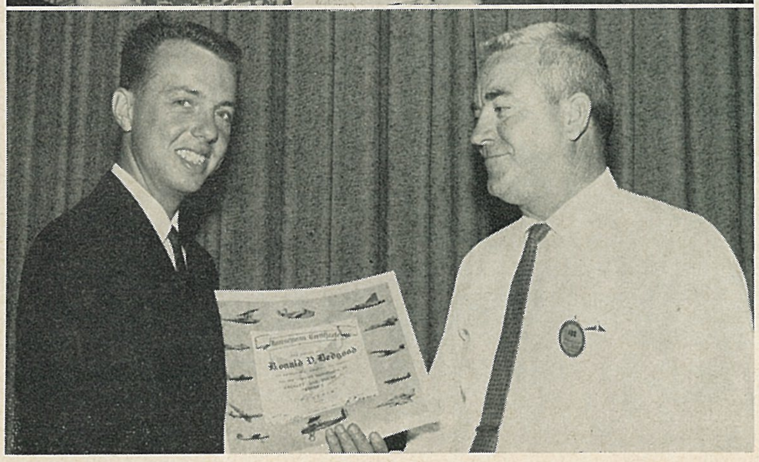
IN TRAINING—At General Atomic Division, San Diego, RAdm. Courtney Shands, Deputy Chief of Defense Atomic Support Agency, addresses 12 selected military officers attending reactor training. They will staff new Armed Forces Radiobiology Research Institute.



"GOOD-BYE"—D. C. Wilkens Jr., GD/Convair manager of industrial relations, bids farewell to AF officers, Maj. Jack H. Thacker and Capt. Henry H. Conner Jr., as they end year at San Diego plant.







APPRENTICES SCORE—At top is GD/Convair prize-winning apprenticeship booth at Southern California Exposition, manned by Dick Singer (Dept. 6-40) and Gilbert Mendoza (Dept. 401-1). Center, Henry Guske (Dept. 31) who has served five years on Joint Apprenticeship Committee is honored by H. W. Rubottom, right, chief of educational services. Below, Ronald Bedgood, now in Dept. 171, is congratulated by Harry Rumbaugh, field operations superintendent, on completion of aircraft and engine apprenticeship.

Apprentices Man Booth at Fair As Display Takes Top Honors

Apprenticeship booth of General Dynamics/Convair was named top trade booth of the 20 on display at the 1961 Southern California Exposition and San Diego County Fair.

The 12x12-ft. booth graphically displayed GD/Convair's program and its correlation with Convair products. The display was based on jet transport operations. Serving as background were five-foot panels of production shots with a color scheme tying in actual components.

Pictures represented each of GD/Convair's five apprenticeship trades—electronics, tool and die, plaster pattern, airframe and power plant, and aircraft electrician.

Attracting special interest was a photo album with pictures of the more than 200 apprentices who have graduated from GD/Convair's four-year program since the first ones completed the training in 1946.

GD/Convair's still photo lab provided blown-up photos and educational services coordinated all arrangements and planning. The company's 39 apprentices assembled and manned the booth during the fair under direction of Wayne Turner, educational services coordinator of the apprenticeship program.

Drivers Will Be Blindfolded During Sports Car Gymkhana

Sports car drivers at GD/Convair will be testing their dexterity in guiding their cars blindfolded over a gymkhana course after tonight's (Aug. 2) business meeting.

Following a short session at 7:30 p.m. in Balboa Park's Natural History Museum, Sports Car Club members and guests will adjourn to the San Diego Zoo parking lot for the fun-type driving test.

After taking a look at the gymkhana course, drivers will be blindfolded, explained Tommy Jackson, club spokesman. A navigator will accompany each driver to give verbal or touch signals for turning, stopping, backing up. Navigators will not be permitted to touch steering wheels.

Prizes for first through fourth place will be based on time required to cover the course. A 10-second penalty will be levied for each pylon displaced from its original position.

GD/Convair participants are required to observe the following conditions in use of the Zoo parking lot—no drag-strip type of driving, no loud exhaust noise, and no use of freshly-oiled sections of the parking lot.

Any General Dynamics/Convair sports car driver is invited to join in the special event.

RUNNERS TO VISIT RANCHERIA CAMP

Convair Road Runners will travel some 60 miles to Burnt Rancheria Public Camp in the Laguna area for their Aug. 4-5-6 outing.

The regular business meeting will be conducted over the weekend and special events include a Saturday night potluck supper, motion pictures, and films and talks by the park ranger.

According to Lowell Ward, club spokesman, things-to-do in the area include hiking, horseback riding, and auto trips to nearby points of interest. Water is available and a store is near the dry camp location.

Wayne Hines Wins Sweeps

Wayne Hines (Dept. 180) paced the parade of some 140 Convair golfers who entered the July sweepstakes at Bonita Country Club. Hines shot low-gross 73.

Only one stroke behind with 74 was Ralph Long (Dept. 218) who was followed in turn by Ron Hinrichs (Dept. 14) with 75.

Low net in the first handicap group went to Ed Caldwell (Dept. 6) with 66. Tied for second low net were G. M. Fuller (Dept. 6), and Joe Catalino (Dept. 192), both with 67s.

In the 16-22 bracket low-gross scorers were Frank Sisson (Dept. 6), 78; Mike Valin (Dept. 138), 86; Len Terrien (Dept. 215), 88; Ken Easten (Dept. 69), 88. Low net honors were earned by Ralph Montgomery (Dept. 21), 67; Gene Howell (Dept. 188), 68; Charles Keys (Dept. 15), 69.

In the last bracket low gross leaders were Robert Hibbs (Dept. 8), 92; Lester Kuhn (Dept. 188), 94; V. P. Mavrinac (Dept. 401), 95. Low net: Clinch Crocker (Dept. 91), 66; J. Santone (Dept. 400), 69; J. Janssen (Dept. 14), 70.

Saturday Potluck For Fishing Club Scheduled Aug. 19

A potluck picnic is on tap Saturday (Aug. 19) at Pecan Park for members of Convair Fishing Club between 6 and 10 p.m.

R. W. Menzie, commissioner, pointed out the Saturday date will give night-shift people a chance to collect button awards won during last year's contest.

The Aug. 19 get-together will be in lieu of the regular meeting. Corn ears for roasting and charcoal will be supplied by the club. Families should bring their own main course. Menu details and arrangements are being coordinated by Ruth Menzie, AT-1-8247.

Commissioner Menzie also revealed plans have almost been completed for an underprivileged children's fishing day to be held the latter part of August. It will be a joint venture with the Astronautics Fishing Club and will be held at a fresh-water lake.

Archers Plan Double Shoot

Convair Archery Club members will utilize two ranges when they conduct an all-day shoot on Sunday (Aug. 13).

Plans call for a ½-field and a single American round to be held the same day.

The field round will be shot at the Balboa Park Field Range in the morning, with registrations open between 9 and 9:15 a.m.

The American round will begin at 1:15 p.m. at the Morley Field Archery Range, located at the foot of Texas St. The shoot is expected to be completed by 3 p.m. Spectators are welcome at both events.

New president of the Archery Club elected at a meeting on July 20 is Bob English of Rose Canyon who will fill out the unexpired term of Al Phipps. The latter man was recently appointed commissioner of the group.

GD/Pomona Linksmen Down Astro, Convair

A sharpshooting GD/Pomona golf team bounced back to win the inter-divisional golf match in the last round played July 22 at Circle R, after trailing GD/Convair and GD/Astro in a previous meet.

Final point scores were GD/Pomona, 148; GD/Convair, 143, and GD/Astro, 134.

At conclusion of the first round at El Rivino Country Club, Riverside, April 22, GD/Astro led with 77, followed by GD/Convair with 75 and GD/Pomona with 71.





BACK TO SCHOOL—In lower photo Gene Graves of GD/Convair educational services outlines responsibility of management to new assistant foremen in current supervisory course. Upper shot shows Tony Zullo of inspection demonstrating proper handling of paperwork to pilot group.

New Supervisors Taking Course In Leadership, Work Organizing

A fresh concept in supervisory training is being developed at General Dynamics/Convair in a newly-organized series of classes.

"Key MANagement," as the course is known, has been arranged by GD/Convair educational services management development group under R. H. Nall to introduce and familiarize newly-appointed assistant foremen with the many facets of production supervision.

Over 100 supervisors are scheduled to be processed through the five steps of the course within the next three months. Following basic introduction to supervision, the "students" progress, in groups of about 20 at a time, into the second phase—paperwork familiarization. The first, or pilot, group completed the 10½-hour classwork July 21. Their progress will be followed closely with tests before and after instruction and surveys during the next few months on the job.

Instructors of the sessions dealing with needs, importance, and procedures of handling and filling out forms and paperwork are Tony Zullo, inspection; Dick Hart, manufacturing control; Joe Garcia, engineering; and Ray Crothers, tooling.

Third part of the course will be group participation in the proper organization of a work day. Fourth, and final, sessions will deal with instructor training, or best methods of training employees assigned to the new supervisors' particular areas.

Responsible for organizing the management training course is Gene Graves, educational services coordinator.

* * *

At least ten imaginative persons with an aptitude for teaching are needed in GD/Convair's new supervisory training program.

Any qualified individuals within the plant, hourly or flat-salaried, who think they can make learning enjoyable and understandable, are asked to get in touch with Gene Graves, coordinator, at ext. 1548, Plant 1.

No formal teaching experience is required, but some background in speaking or other form of projective expression is desirable.

Subjects will deal with basic business methods — methods of improvement, organization of time, cost reduction, and instructor training.

Double Session Set For Water Ski Club

A double dose of activity is planned for members and guests of CRA Water Ski Club, Aug. 5.

Skiers will sweep through slalom and jump events from 6:30 to 9:30 a.m. at Santa Clara Point, then move the base of operations to Tierra del Fuego for a regular ski session and lessons until about 1 p.m.

Also planned at Tierra del Fuego, between 9 a.m. and 1 p.m., are ski outings on Aug. 6 and Aug. 12. On Aug. 9 an evening ski is slated between 5:30 and 8 at Santa Clara Pt.

Free Ice Cream, Door Prizes Scheduled for Dept. 190 Picnic

A family picnic and fun festival is on tap for all present and former Dept. 190 people at GD/Convair when they gather under the trees at Pecan Park Sunday (Aug. 13).

Activities begin at 11 a.m. and continue throughout the day and evening. Each family will provide its own basket lunch with free ice cream and punch to be ladled out to children under 12. Price is 50¢ each for adults; children, free.

Highlight of the jam-packed program will be door prize drawing for two grand awards—weekend for two at Islandia Hotel on Mission Bay, and champagne dinner for two at the Cotton Patch. Children's prizes and valuable raffle prizes also will be handed out, said F. E. Kirby, now Dept. 100-5, who spearheaded arrangements.

Games, contests, a talent show, and live music by the "Vibrants" will round out the day.

Kirby reminds all Dept. 190 employees since transferred to Depts. 100 and 25 that they are included in the picnic invitation. He can be reached at ext. 1275 for a "nose-count" of all who plan to join in the fun.

Other committee members are Bob Pugh, Earl Margitan, John Cygan, Lem Dean, Mary Laffoon, Art Medrano, Frank Chalupnik, Nick Acupido, Jim Mackill.

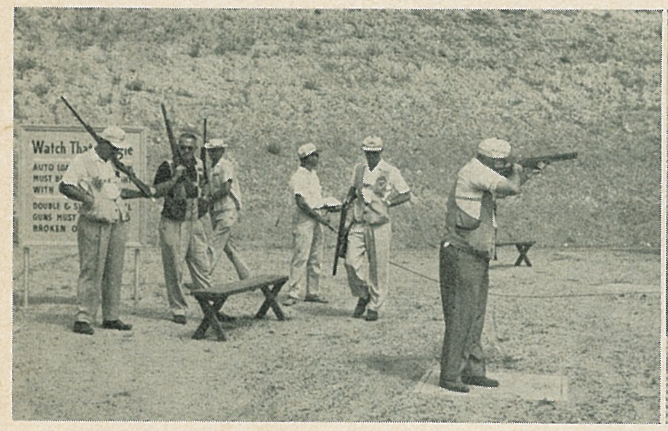
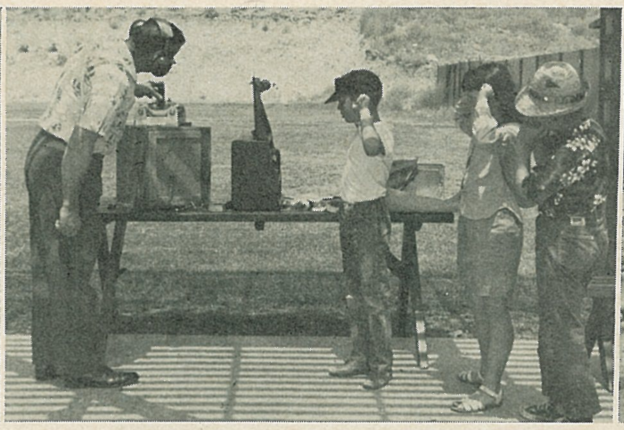
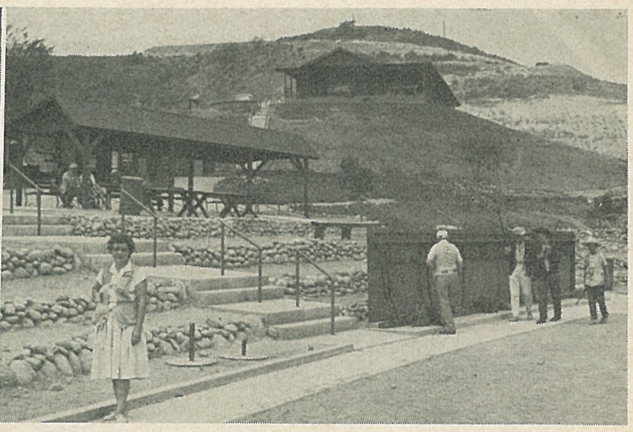
'CARRYALLS' ADDED TO MOTOR FLEET

Seen now on runs between GD/Convair facilities are snappy van-type vehicles recently added to GD/Convair's motor fleet.

B. R. Hisaw, chief of transportation operations, said that four Chevrolet Greenbrier carryalls are in use under a two-year lease agreement. Because of versatility as passenger or cargo carriers they are being put to a number of uses.

They are making the regular runs between Plant 1 and the ramp site, and to Rose Canyon during off-rush hours. They also transport flight crews and gear back and forth to the flight line, and cargo loads when necessary.

Nine passengers can be accommodated in the three seats, and a full load of cargo with removal of the two rear seats. Double doors on the sides and rear simplify loading.

BOOMING—CRA Gun Club facility at Gillespie Field is always busy place on weekends. Skeet, trap and rifle ranges get plenty of play. In photo at left, J. K. Field, Convair chief of employee services, sights in on target. In center photo, kids plug ears as pistol shooter checks accuracy repeatability of weapon. Shooter has his hand on pistol which is positioned on machine rest. Atop hill in right photo is CRA Clubhouse.

CRA Calendar

(Convair Recreation Association has some 40 activities in operation. For information on Convair sports, call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

ARCHERY — All-day shoot Sunday (Aug. 13) Balboa Park field range. Registration between 9-9:15 a.m.

BRIDGE CLUB — Weekly sessions every Tuesday, 7:30 p.m., Barcelona Hotel, 326 Juniper St.

CAMERA CLUB—Model shoot Aug. 14, Photo Arts Bldg., 7:30 p.m.

FISHING CLUB—Family potluck picnic Saturday (Aug. 19) Pecan Park, 6-10 p.m.

GARDEN CLUB — Annual Summer Flower Show, Sunday (Aug. 13), Floral Association Bldg., Balboa Park. Open to public 1-6 p.m. No meetings until October.

GOLF—CRA sweeps Aug. 5-6 at Coronado.

GUN CLUB — Monthly shoot Aug. 6 at 9 a.m., Gillespie Field Range.

MODEL RAILROAD — Meetings each Friday, 7:30 p.m., House of Charm, Balboa Park.

MOVIES—Reduced price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB — Next shoot Aug. 13, 9 a.m., San Diego Police Pistol Range, Federal Blvd. and Home Ave.

RADIO CLUB — Meeting tomorrow (Aug. 3), 7 p.m., Harbor Drive headquarters.

ROAD RUNNERS — Weekend outing Aug. 4-6 to Burnt Rancheria Public Camp.

SPORTS CAR CLUB—Meeting tonight (Aug. 2), 7:30 p.m., Natural History Museum, Balboa Park, followed by blindfold gymkhana, SD Zoo parking lot.

SWIMMING — Free family swim night Aug. 5, Mission Beach Plunge, 7-9 p.m. Tickets at employee services.

VOLLEYBALL—Informal play each Wednesday, 7-10 p.m., Federal Bldg., Balboa Park.

WATER SKI CLUB—Ski event Aug. 5, Santa Clara Point, 6:30-9:30 a.m. Weekend skiing Aug. 6 and 12, Tierra del Fuego, 9 a.m.-1 p.m. Evening skiing Aug. 9, 5:30-8 p.m., Santa Clara Point.

Padre Ticket Drawing Open

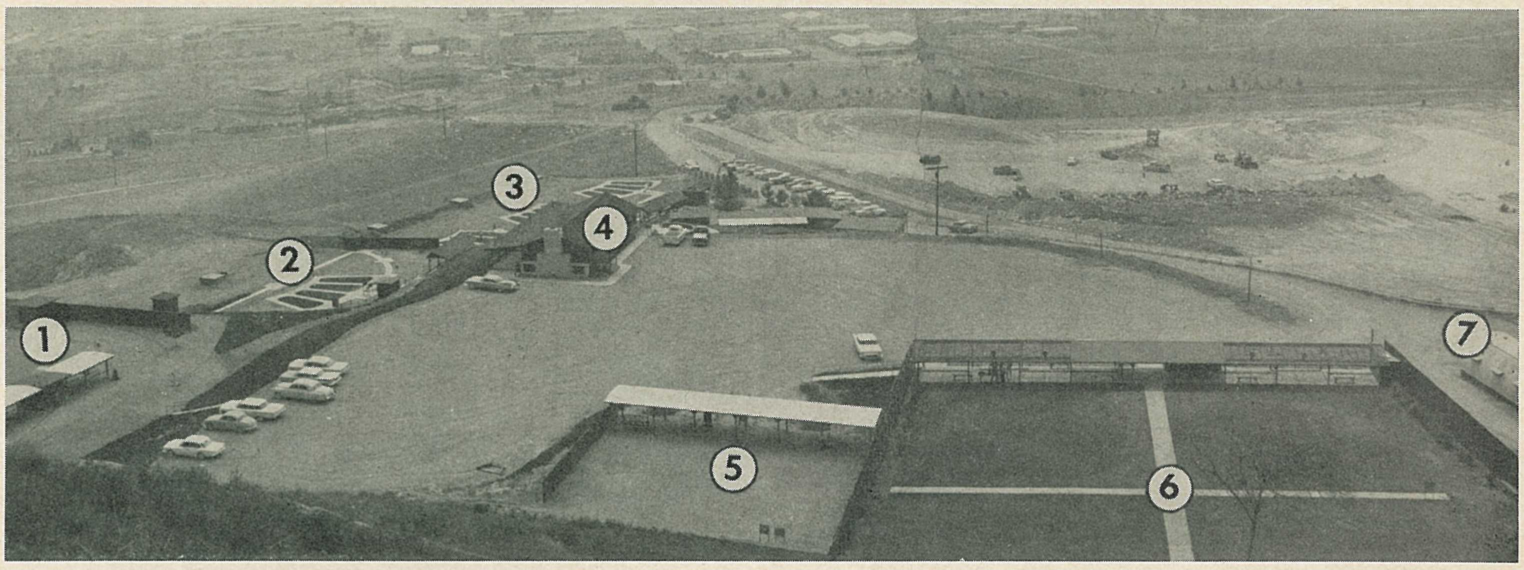
Baseball fans at GD/Convair have their last chance to win free tickets to Padre games in the final drawing of the season.

Entries dropped in boxes now will have a chance to be pulled out of the hat for a couple of free passes in the Aug. 11 drawing at 3:30 p.m.

Winners will see one of the games pitting San Diego ball club and Honolulu during the last week of home games at Westgate Park, Aug. 22 through 27.

To be eligible, entries must contain name, clock number, shift, department number, location, and plant phone extension. Each person is entitled to one entry.

Boxes are at Convair employee services, Bldg. 32, Plant 1; Rose Canyon, in the office of Virginia Cannon, ext. 2125; at the ramp, in the office of Leonard Smith, Bldg. 37.



SHOOTERS' PARADISE—Complete transformation has occurred at GD/Convair CRA Gillespie Field facility since land was first leased late in 1955. Panoramic view shows extent of improvements: (1) upper skeet range; (2) combination skeet and trap range now being wired for lights, thus allowing it to be used throughout winter; (3) three trap ranges; (4) clubhouse which is used for meetings of many CRA groups in addition to Gun Club; (5) 50-ft. small-bore rifle and pistol range; (6) 50-yd. small-bore rifle and pistol range, fully equipped with lights; (7) part of quonset hut for storing equipment is visible, still farther to right is boat builders' building used for campster and fiber glass boat construction.—Photos by Frank Linn, Dept. 400-1.

CRA *Sports & Recreation* Convairiety

36 Dahlia Classes Set For CRA Summer Show

Doors of the San Diego Floral Association Bldg. in Balboa Park will be opened to spectators between 1 and 6 p.m. on Aug. 13 when Convair Garden Club presents its annual Summer Show.

Major emphasis will be on dahlias with no less than 36 classes scheduled for them. The four dahlia divisions will be one medium or large bloom (over 4 inches in diameter); one cactus or semi-cactus (over 4 inches in diameter); three pompons (less than 2 inches in diameter); and three miniatures or balls (two to four inches in diameter).

E. L. Zimmerman, club commissioner, said a large number of good blooms was expected to be entered. Entries will be taken starting at 7:30 a.m. and all are to be in place by 11.

Other major show divisions will include citrus and deciduous fruits, vegetables, arrangements and corsages, and a children's division.

Three "best of show" awards will go for best dahlia, largest dahlia and smallest dahlia. Other "best" awards will be given for citrus, deciduous, vegetable, arrangement, corsage and children's entries.

Commissioner Zimmerman also reminded club members that no business meetings are scheduled by the club until Oct. 11.

Camera Club Awards Made

Five Convair amateur photographers were singled out for honors at the July 24 quarterly contest judging sponsored by the CRA Camera Club.

A good number of members and visitors were on hand to see Wayne Grayson, president of Southern California Association of Camera Clubs, judge the black and white and color entries.

Print honors were won by Howard Harvey (Dept. 6), Allen Henny (Dept. 6) and Joan Ainsworth (wife of Ron Ainsworth, Dept. 144). In the color competition, honors went to A. E. Perry (Rose Canyon), Henny, and two awards to Ron Ainsworth.

A model shoot on Aug. 14 will be somewhat out-of-the-ordinary, Ainsworth reported, featuring fencers in action as well as a glamorous girl model.

The program will start at 7:30 p.m. in the Photo Arts Bldg. with a showing of slides which may encompass any subject. Visitors are welcome and encouraged to bring slides.

GD/E GIRL WEDS

Linda Carpenter of General Dynamics/Electronics Dept. 6 was married July 15 to Kenneth J. Lawen. They will make their home for the present in Waukegan, Ill., where Lawen will be attending school at the Great Lakes Naval Training Center.

Discount Offered For Two Musicals

Two sets of tickets to coming musical productions go on sale tomorrow morning (Aug. 3) at 9 a.m. at GD/Convair employee services.

Reduced prices, through CRA arrangements, are offered to the coming Circle Arts Theatre production, "Take Me Along," starring Jack Carson, and to the Starlight Opera's "Chocolate Soldier."

Convair night for "Take Me Along" is Aug. 13. Prices for GD/Convair people have been cut to $2.75, $2.20, $1.80, and $1.40.

Tickets to the Aug. 20 performance of "Chocolate Soldier" are $2.45 for regular $3.50 seats.

New Beginners Dance Class Slated by CRA Hoedowners

Convair Hoedowners are already making plans for a new six-months-long beginners square dancing class tentatively scheduled to start Sept. 14.

Company couples and singles are invited to register for classes during the next month by contacting either employee services, ext. 1245, Plant 1, or Maury Scholz, ext. 2916, Plant 1.

Stressing fundamentals, the course will take steppers to the intermediate level under the direction of instructor Don Browne.

Classes will be held Thursday evenings, from 8 to 10 p.m., at American Legion Hall, 4061 Fairmount Ave., said Hoedowners Commissioner Scholz.

Next event on the agenda for club members is the second annual campout at Ramona Oaks Aug. 11-12-13 featuring camping, swimming and dancing throughout the weekend.

Scholz also reported that the decoration committee had things well in hand for the fourth-Saturday-night party on Aug. 26 which will be staged in authentic Hawaiian luau atmosphere.

Weekly dances held by the club on Tuesday nights at American Legion Hall, between 8 and 10 p.m., are continuing to attract good crowds. Proving especially popular is the "birthday night" dance on the second Tuesday during which a free cake is given to a stepper whose birthday falls during that month. This fling also features all singing calls, no patterns.

EXCHANGE TICKETS FOR PADRE GAMES

Exchange tickets for discount prices to Wednesday night home games of the Padres still are available at GD/Convair employee services, Bldg. 32, Plant 1. They are worth a 75-cent reduction on any seat at Westgate Park.

Bishop Takes Master Class

CRA Commissioner Ash Bishop (Dept. 141-1) notched a first-place in the July 23 Pistol Club matches, winning the master class with a score of 288.

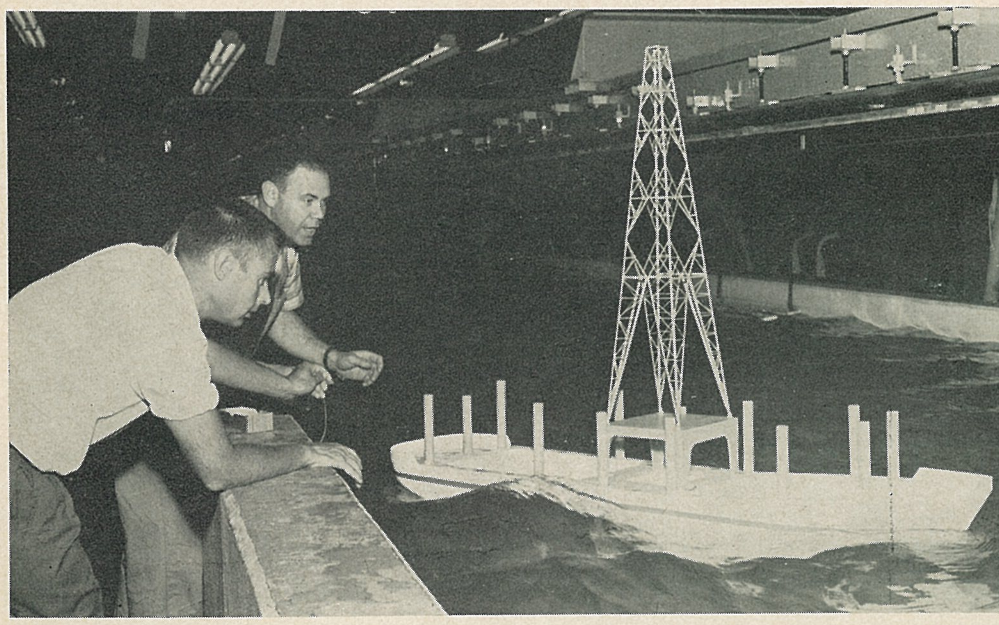
It marked the first time in a long time that Bishop has won the top spot at a club shoot. To do it, he edged Carl Hornburg (Dept. 139) and Jim Halfacre (Dept. 180) who posted scores of 285 and 284 respectively. Ralph Picard (Dept. 6, GD/E) was fourth with 282.

Ranked one-two in the expert class were E. E. Bickar (Dept. 250), 274, and W. G. Walker (Dept. 6), 268. Sharpshooter credits went to Bill Ginsky (Dept. 6), 260, and L. L. Richeson (Dept. 128), 244. L. G. Lair (Dept. 401-2) was top marksman with a score of 226.

Contestants in the short national match event were led by Hornburg's 286 and Halfacre's 274.



TOP TEAM—Trophies in hand, members of GD/Convair rifle squad which placed first in IRC Gun Shoot last month, are (from left): Harold Schnaubelt, Earl Day, "Rip" Saether, Bill Isbell.



CUSS II—C. E. Jones Jr., senior hydrodynamics engineer at GD/Convair, and representative (in foreground) of Global Marine Exploration Company observe static wave tests of CUSS II in 300-ft. towing tank at San Diego plant. Drilling rig on barge will be almost as high as the 264-ft. vessel will be long.

Heavy Weather

Moon Study Ship Model Rocked By 'Giant' Waves in Towing Tank

Results of hydrodynamic tests of an off-shore drilling barge model at General Dynamics/Convair will play a part in an attempt to answer questions about the moon's surface.

Tests of the barge model have been conducted by GD/Convair hydrodynamics engineers in the 300-ft. towing tank at the San Diego plant, under contract to Global Marine Exploration, a subsidiary of Union Oil Company of California.

Data obtained from the model tests will be used by Global Marine Exploration in the construction of CUSS II, a barge equipped with a drilling rig which will churn through the earth under the ocean floor.

"Project Mohole," as the program is called, is expected to supply information about the moon's surface because rock strata on the ocean's floor are believed to be similar to rock surface on the moon.

Simply stated, the purpose of the model tests conducted by C. E. Jones Jr., senior hydrodynamics engineer, was to ascertain the severity of seas the vessel could experience before it would become necessary to suspend operation.

Because some of the Mohole drilling occurs in depths of up to 1,800 feet, it is essential that the ship stay securely in position over the drilling site. A drift of only a few degrees could put a "kink" in the drill.

The 5,000-ton, 264-foot CUSS II will support a drilling rig almost as high as the ship is long. The drill is dropped through a "well" located almost directly in the center of the vessel.

The ship, which is unusually broad-beamed, has bulwarks fore and aft, high enough so that crew members can operate deck winches in 12-ft. waves. The ship has both bow and stern anchors.

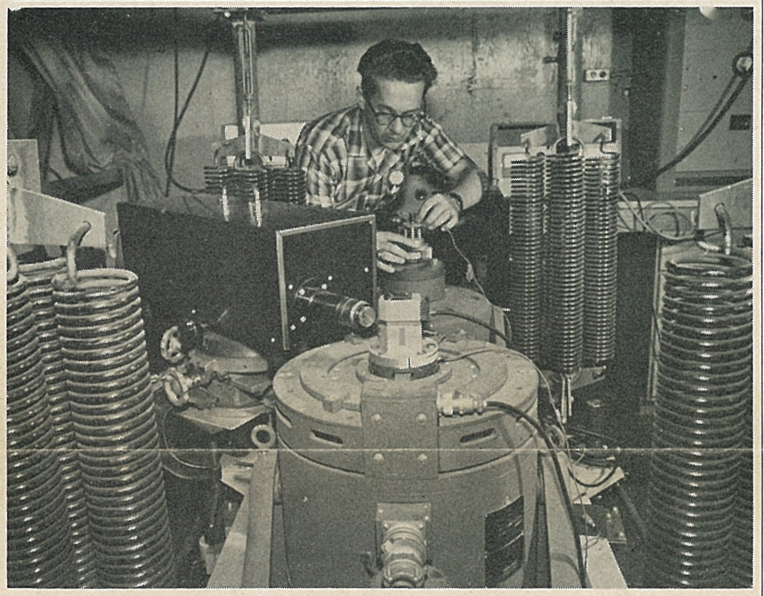
An important portion of the testing was to find out if the ship's design would allow it to continue drilling in positions other than head-on into the waves.

"The model tests showed the vessel would be able to operate up to a 45-degree heading to sea before the maximum allowable roll angle of five-degrees was exceeded," said Jones.

Tests of the 1/48th scale model included smooth water resistance characteristics, yaw stability, rolling tests and static wave tests.

In the latter category the model was subjected to scale waves 12-feet high and 180, 300 and 1,000-feet in length, said Jones.

Testing of surface vessels is only one facet of the GD/Convair hydrodynamics operation. Capabilities include model testing of seaplanes, hydrofoils, underwater bodies and ground effect machines.



SET FOR SHAKE—L. B. Parker, test engineer, hooks up accelerometer for test on vibration standard in GD/FW standards laboratory.

Shake Test Accuracy Assured As Standards Checked by U.S.

When engineers at General Dynamics/Fort Worth run vibration tests on Hustler components and subsystems, they're virtually certain of getting "absolutely" accurate results.

Reason is a recently-installed vibration standard in the GD/FW Standards Laboratory. It is used to calibrate accelerometers, thimble-sized "gadgets" which measure vibrations during runs in the test lab, or on B-58s in flight.

GD/FW's standard has been calibrated with the National Bureau of Standards in Washington, D. C. NBS is the final word on accuracy for all weights and measurements.

"This means, in effect, that accelerometers calibrated on our standard are conforming with the high standards of NBS. Thus the margin for error is almost negligible," said Bob Mosley, project test engineer.

Installation of the standard gives tested components "traceability," a quality highly coveted by Air Force.

"This means that Air Force can trace back through the testing program to determine if the tester which tests our product was checked out by NBS," Mosley added.

GD/FW now ranks as one of only a handful of companies in the country boasting such a high-reliability standard.

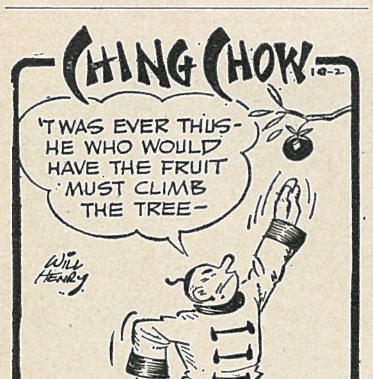
Built in a steel frame about 5 feet high, 6 feet long and 3 feet wide, the vibration standard has a seismic base designed by test engineer L. B. Parker.

The base is suspended on four sets of springs, eliminating the possibility of any "floor noise" causing vibration.

Frequency range is from five to 2,000 cycles per second. Five cycles produce a visible up-and-down motion. During maximum cycle, however, the vibrator moves so fast that it actually appears to be standing still, creating instead a high-pitched whining noise.

Intensity of vibrations, which can lead to failure of a part or system, are measured in forces. The vibrator measures in a range of 1 to 20 Gs.

Extremely low vibrations are measured visually through a small telescope on the vibrator. During these tests, movements of grains of sand on a piece of sandpaper are observed.



Miniature Atlas Fired To Test Varying Designs Of Flame Deflectors

Rocket firings, in miniature, during the last couple of years in a thermodynamics test area at General Dynamics/Convair are providing valuable information in design of an Atlas missile component.

In spite of diminutive size of blast-offs (compared to actual missile launchings) plenty of noise, flame, and smoke pour out to lend a touch of realism to firings on the bayside of the San Diego seaplane ramp site.

In a GD/Astronautics assist project, over a dozen separate tests of different flame deflectors designed for varying Atlas ICBM launch facilities have been conducted by GD/Convair thermodynamics laboratory engineers. P. P. Leo (Dept. 6-35) has been engineer in charge of the test project since its inception months ago.

Small rockets, approximately 1/30 scale in size, using the same liquid fuel and oxidizer as the Atlas, are placed inside a tube simulating the base of an actual missile, then fired to shoot flame through the deflector beneath. Pressures and temperatures are measured and recorded in each firing.

A recent test setup, just concluded, was collecting information which may determine just how thick a concrete wall of a particular complex at the Atlantic Missile Range must be to withstand Atlas firings, and at what angle it must be constructed to protect equipment from flames at blast-off. A thick one-foot-square piece of copper simulated the wall; pieces of metal rigged around the blast plate played the parts of ground equipment and gantry tower, which in actuality, would be located about 300 feet from launching pad.

Other tests have provided design data for Atlas flame deflectors and investigated vibration and heating in underground silo launch sites.

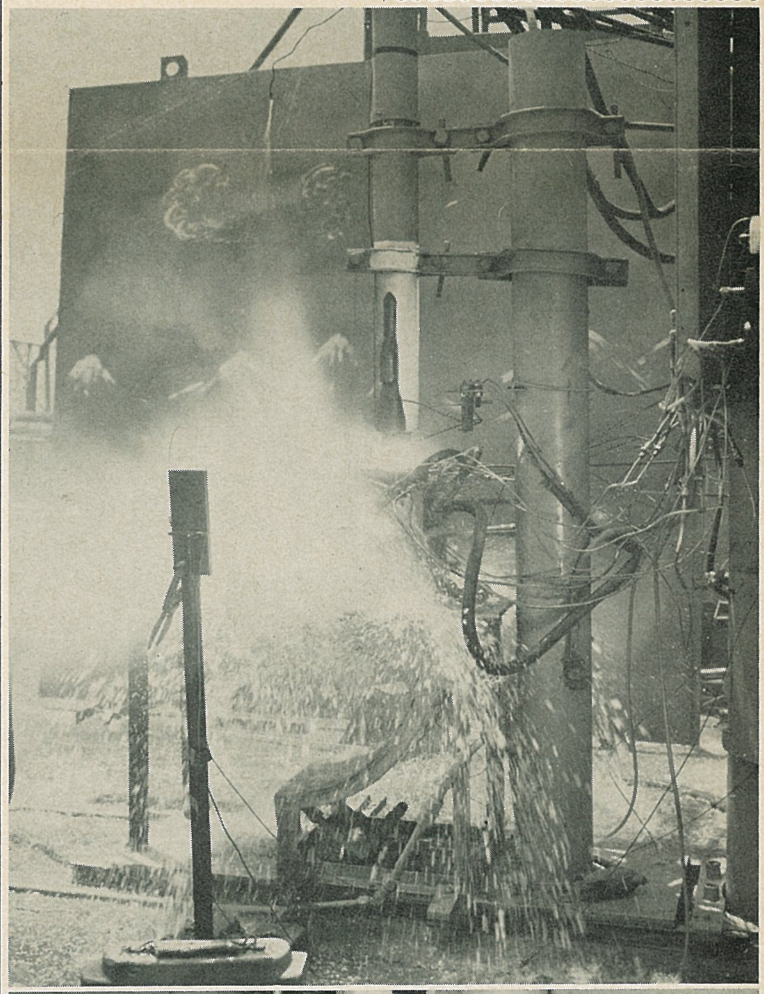
Each test extends over a week or two with 10 to 15 firings, said Leo, and are conducted at any time there is a need—when there is a modification or change in Atlas flame deflector configuration. Data is evaluated by GD/Convair thermodynamics lab engineers and submitted to Astronautics engineers involved.

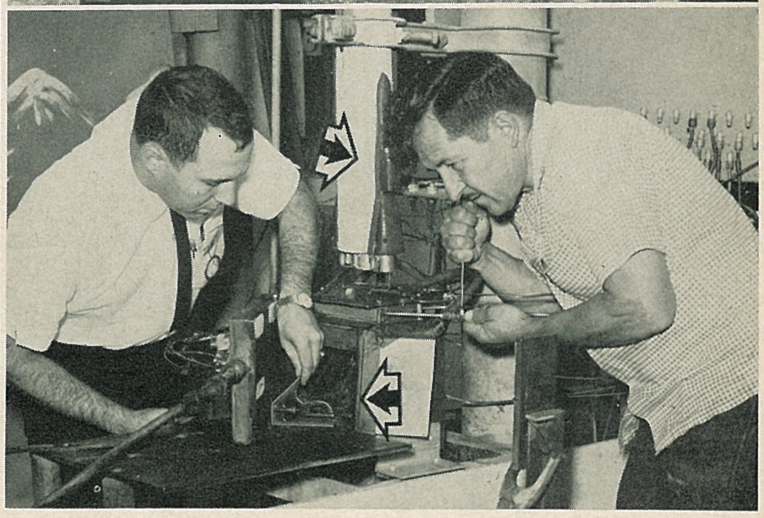
F-106 Record Holder Assigned to George

GD/Convair's record-breaking F-106A, which holds the official world speed record for jet aircraft, is now in service at George AFB, Calif., as a combat-alert, all-weather interceptor.

The plane—No. 56-0467, was converted from a test ship to a fully operational defense weapon at the Palmdale facility and delivered to the Air Defense Command for duty with the 329th Fighter-Interceptor Squadron at George.

It set its record of 1,525.95 miles per hour in a speed run in December of 1959 at Edwards AFB.





"BLAST-OFF"—Flames and sparks burst forth during test firings at GD/Convair thermodynamics test site. "Snowy mountain scene" in background is painted scenery. Below, Paul Leo, thermodynamics engineer, checks angle between Atlas flame deflector under test and simulated complex wall while Frank Fischl, lab test mechanic, tightens connections in setup at SD seaplane ramp. Arrows indicate midget Atlas and flame deflector.

Is It News?

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53 109

GENERAL DYNAMICS

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Convair EDITION

Convair news office: Plant 1, Bldg. 32, ext. 1071.

Vol. 14, No. 17 Wednesday, August 16, 1961

SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.

Jet Customer Groups Receive Flight Training

Three airline customer groups have been receiving initial production flight training at General Dynamics/Convair during the last month preparatory to delivery of their Convair jet airliners.

Federal Aviation Agency aircraft specialists played a dual role as instructors and "students" when at the San Diego plant last month. While the 13 FAA men were receiving a thorough briefing on the Convair 880-M from GD/Convair flight engineer/instructors, they also checked out Convair pilots and flight engineers for type certification. The FAA 880-M is due for delivery some time the middle of this month.

Another group, from American Airlines, completed its first 990 familiarization last Friday (Aug. 11). Besides classwork, they each spent 10 to 15 hours in the 990 cockpit procedures trainer.

About 100 flight crewmen from Japan Air Lines are going through a comprehensive 880-M flight training program extending over several months at San Diego. In addition to the Convair courses set up for all jet transport customers, JAL is conducting classes with its own instructors at the San Diego training headquarters.

FAA personnel at San Diego for the month's course, completed July 21, were 12 from Oklahoma City, Okla., FAA headquarters, including a former Convair flight engineer/instructor, C. L. Johnson, now a flight engineering specialist with FAA.

Heading the group was Charles F. Stacy, chief flight instructor. Others

(Continued on Page 2)



OFF TO ZURICH—Swissair and GD/Convair flight personnel look over check lists before leaving San Diego for Zurich, Switzerland, last Friday with Swissair 880-M in background. From left are A. Zeller, Max Heer, both Swissair flight engineers; A. P. Wilson, GD/Convair flight captain; Ludy Knudsen, GD/Convair flight engineer; H. Herrmann and Walter Zolliker, line maintenance group leaders; J. Wenzinger, line maintenance supervisor; and H. Krahenbuhl, chief navigator, all Swissair.



990 CLASS—American Airlines flight specialists at GD/Convair during last month for first formal Convair 990 jet transport familiarization course pose along flight line with American Airlines 990 ready for takeoff in background. At far left are P. H. Selby, L. W. Hughes, Convair production flight.

United Fund Gifts Top Con-Trib-Club Donations in 1961

Over $112,000 was given to charity organizations during the last six months by General Dynamics/Convair employees through their Employees' Con-Trib-Club deductions.

In addition to assists to the San Diego United Fund and other philanthropic groups, $12,204.90 went to help 93 Convair individuals through the Emergency Aid fund.

Actual receipts for the charity fund amounted to $129,186.63 and $12,860.99 for Emergency Aid in the months from January through June of this year, reported Keith Sears, Con-Trib-Club Committee secretary.

As of July 30 nearly 80 per cent of all Convair employees were contributing to Con-Trib-Club. This was, in actual figures, 14,759 at Convair plants, 200 at Palmdale facility, and 165 at Holloman AFB.

Over half of the $112,230 going to charities was paid in two installments of $31,250 each to the United Fund of San Diego County.

Other organizations getting a boost from Con-Trib during the first half of 1961 were:

Lakota Tarca Oyanke, $150; Otero County United Fund, $1,000; Pathfinder of San Diego, Inc., $500; San Diego Council of Churches, $1,000; Family Service Association, $3,500; North Antelope Valley Community Chest, $2,400; South Antelope Valley Community Chest, $1,600; San Diego County Assoc. for Retarded Children, $2,750; San Diego County Heart Assoc., $5,000; San Diego Society for Crippled Children, $4,000; Sunnyside Guild, Inc., $1,000; YMCA of San Diego, $4,000.

American Cancer Society of San Diego County, $5,000; Muscular Dystrophy Assoc. of America, Inc., $1,000; Jamul-Las Flores Community Club, Inc., $150; San

(Continued on Page 2)

Alaska 880-M Will Fly Seattle to Fairbanks

Alaska Airlines took delivery of its Convair 880-M jet airliner the last day of July and flew it north to home base at Seattle, Wash., the same day.

The Convair jet transport will go into passenger service between the Pacific Northwest and Alaska within the next week.

Ownership documents to the craft were presented to Charles F. Willis Jr., president and general manager of Alaska Airlines by J. H. Famme, vice president—operations for General Dynamics/Convair, before the 880-M winged away from San Diego.

The Golden Nugget jet was displayed at Los Angeles International Airport for several hours before flying on to Seattle. It sped the 1,069 statute miles in 1 hour, 43 minutes, 46 seconds, bettering the best previous Los Angeles-Seattle jet transport time by three minutes and a half.

When it begins scheduled flights between Seattle and Fairbanks this weekend (Aug. 20), it will leave Seattle at 7 p.m. local time and arrive at Fairbanks at 6:50 p.m., their time. The actual flight time is set for 2 hours, 50 minutes. It will make daily round-trip flights between Seattle and the Alaskan city.

Alaska Airlines is the fourth customer airline to accept Convair 880-Ms. Civil Air Transport

(Continued on Page 2)

New Eagle Design Drawn For Alaska

Design of stylized golden eagle emblazoned on Alaska Airlines' Convair 880-M was created by a General Dynamics/Convair industrial designer, Ernest L. Casco. (Incidentally, Casco is a native of Argentina.)

Casco's interpretation of Alaska Airlines' corporate symbol was chosen by the airline as most expressive of the eagle motif, adopted in 1958. One huge bird extends the length of the fuselage and is repeated in smaller size on vertical fin and jet engine pods.

Smith Selected For Marketing, Planning Post

Frank Pace Jr., General Dynamics board chairman, last week appointed Kenneth M. Smith a vice president of General Dynamics.



Kenneth Smith

Formerly Convair director of military relations, Smith's new duties will be in the areas of marketing and planning.

Educated at San Diego State College, California State Polytechnic and St. Mary's University, Smith joined Convair in 1939 and served in San Diego as well as in Fort Worth, Elizabeth City and Tucson during war days. He joined the then Guided Missile Division (now GD/Pomona) in 1952 in field operations, returning to San Diego in 1954 to

(Continued on Page 2)

Pre-Retirement Physical Check Offered to 'Seniors' By Convair

Pre-retirement physical checkups, offered several months in advance of retirement date, are being conducted at a steady rate at the plant hospital (Bldg. 14) by the GD/Convair medical department.

Individuals are notified personally by the hospital and are free to accept or reject.

"The checkups are offered entirely as a service to employees about to retire," Dr. F. M. Amaral, chief plant physician, explained. "They are not required, of course. However, about three out of four are taking advantage of the service."

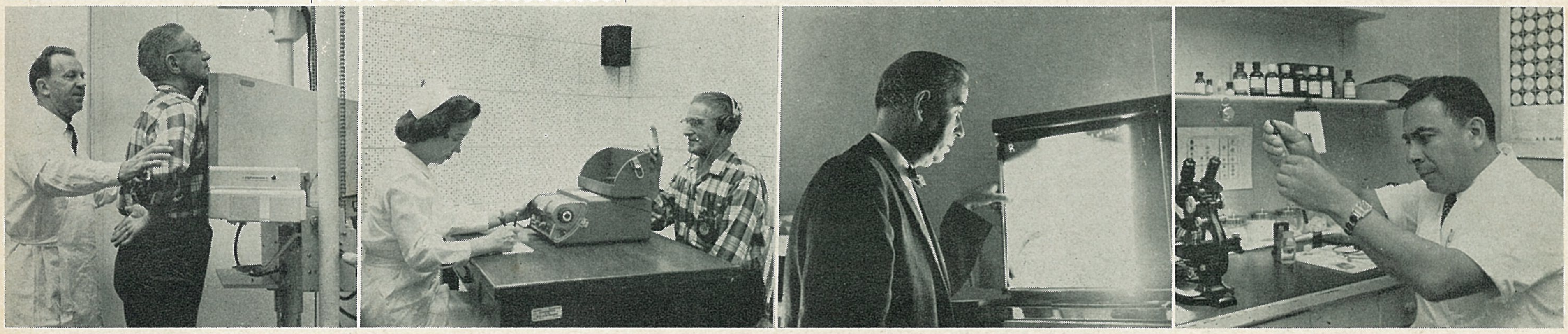
The examinations require about an hour on the average, and give the individual general information on his state of health far enough in advance of retirement to start remedial action in case of conditions which might require treatment.

"For the most part, we find our senior citizens are rather good physical specimens for this time of life," Dr. Amaral commented.

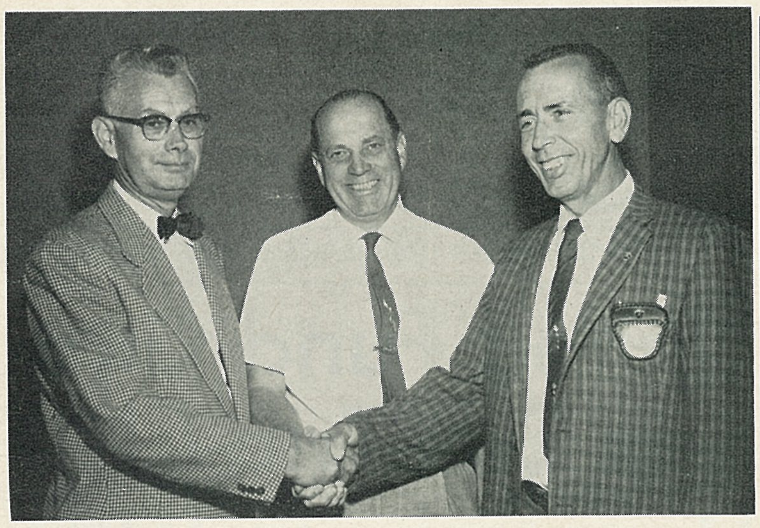
Checkups start with an updating of the individual's medical history. In some cases, involving employees who have been with the company for many years and who have not been seen before by the medical section, a complete medical history is taken. This is merely a recounting of any illnesses or injuries over the years to point up areas of special interest in the examination.

Following are a chest X-ray, a hearing check with the audiogram, urinalysis, visual check on eyes, ears, nose, throat, teeth and blood pressure test, etc. Final step is a discussion of findings and any recommendations which the individual may wish to call to the attention of personal medical advisers.

"As far as the checkup goes, it gives a reasonable insight into the state of health," Dr. Amaral continued. "We take no action on findings beyond notification of the individual."



CHECKUP—Photo sequence illustrates some of steps in physical examination service offered Convair "senior citizens" in advance of retirement. At left, C. S. Taylor Jr. of medical section positions J. W. McCartney, Dept. 120, prior to chest X-ray. Left center, Nurse Jean George tests McCartney's hearing. Right center, Dr. F. M. Amaral, chief plant physician, examines chest X-ray film. Right, Al Zamora conducts clinical analysis in laboratory.



CONGRATULATIONS—D. C. Eby, Dept. 401, left, and C. B. Reid, Dept. 101, right, recently received their 25-year service emblems from J. H. Famme, Convair vice president-operations.

Log Book Entries

Service Emblems

CONVAIR

Service emblems due during the period Aug. 1 through Aug. 15.

Twenty-five-year: Dept. 101, C. B. Reid (due 7-15-61); Dept. 148, D. E. Palumbo; Dept. 400, F. L. Kany; Dept. 401, D. C. Eby (due 7-7-61).

Twenty-year: Dept. 21-1, H. L. Teague; Dept. 25, R. T. McMurry, Alvar Sjostrom; Dept. 31, L. D. Emerson, C. E. Horton; Dept. 34-2, H. L. Henrie, E. J. McCann; Dept. 45-1, R. W. Tidball; Dept. 100-6, Harold Perkins; Dept. 140, W. C. Burgess; Dept. 146, H. L. Wade; Dept. 180, E. L. Wilhoit; Dept. 190-6, Walter Vierra; Dept. 400, E. E. McDaniel, G. A. Scott; Dept. 401-5, E. T. Belland.

Fifteen-year: Dept. 1-71, Evelyn C. Johnson; Dept. 8-4, C. D. Joy; Dept. 14-1, F. W. Matson; Dept. 25-9, E. E. Albord, V. J. Masewicz; Dept. 128, R. F. Stull; Dept. 140, B. H. Heastie; Dept. 160, David Salvatierra Jr.; Dept. 188-4, A. E. Tomlinson; Dept. 197-8, E. M. Grace; Dept. 223, G. A. Golding; Dept. 400-2, C. C. Lord; Dept. 401, W. D. Burcher, D. A. Prentice.

Ten-year: Dept. 3-1, D. H. Booker, B. H. Diffenbaugh, E. J. Sweeney; Dept. 4-2, R. E. Wilkinson; Dept. 6, R. L. Bagley, D. S. Cates, J. S. Griffith, C. L. Harger, R. E. Sassaman, J. E. Scott Jr.

Dept. 14-4, J. C. Christian; Dept. 21-1, A. H. Gunn; M. R. Pressley; Dept. 25, Marshal Evans, Genevieve M. Keogh; Dept. 31, J. R. Metcalf; Dept. 44-5, Elizabeth W. Cruger; Dept. 91, Shirley E. Brunton, R. E. Gunnerson, Luverne W. Holm, Leonard Smith.

Dept. 101, Lorene W. Wafer; Dept. 120, Micaela E. Fralick, Ina S. Johnson; Dept. 135, Sue D. Johnston; Dept. 138, M. L. Young; Dept. 139, Alfred Salcido; Dept. 140, R. M. Bjorstrom, Willie White; Dept. 145, H. B. Jenkins Jr., Cornelius Norwood; Dept. 148, J. E. O'Hara, D. E. Sanders.

Dept. 171, R. E. Harns; Dept. 188-2, Ann H. Anzalone, A. B. Lyle; Dept. 190-9, W. F. Van Dusen Jr.; Dept. 192, L. J. Gorsich, J. J. Tessary, F. W. Walter; Dept. 215, Nina S. Shepard, Luella E. Voosen; Dept. 217, C. G. Merrill; Dept. 223, H. A. Smith; Dept. 288, Reba G. Marks, R. C. Wakefield; Dept. 292, Evelyn V. Stewart, Cora G. Young; Dept. 400-2, R. F. Summers; Dept. 401, R. F. Means, J. L. Soto.

GD/ELECTRONICS

Ten-year: Dept. 5, W. M. Hooper; Dept. 6, Bette H. Wilhoit.

Births

CONVAIR

ADAMS—Daughter, Nancy Yanez, 8 lbs., born July 25 to Mr. and Mrs. R. C. Adams, Dept. 138.

GRATO—Son, Michael, 6 lbs., 4 oz., born July 19 to Mr. and Mrs. A. J. Grato Jr., Dept. 145.

MEDINA—Son, Harry Humberto, 8 lbs., 7 oz., born July 7 to Mr. and Mrs. V. M. Medina, Dept. 101.

RIVERA—Twin sons: Gustav, 6 lbs., ½ oz., and Charles, 7 lbs., 1½ oz., born July 22 to Mr. and Mrs. E. G. Rivera, Dept. 192.

Personals

CONVAIR

The family of Walter R. Houck gratefully acknowledges the kind expressions of sympathy by Convair friends.

* * *

We are grateful to our Convair friends for the beautiful flowers and messages of sympathy received at the death of our father.

Frances Plumley and Joan Reynolds, (both Dept. 192-5).

Retirements

CONVAIR

CALDWELL—Harry R., Dept. 192-3. Seniority date Oct. 5, 1953, retirement effective July 31, 1961.

GARDNER—Clarence A., Dept. 25-4. Seniority date Oct. 13, 1950, retirement effective July 28, 1961.

GERHART—Annette S., Dept. 401-7. Seniority date Feb. 13, 1951, retirement effective July 31, 1961.

GOEHRING—McKinley, Dept. 25-1. Seniority date Dec. 20, 1950, retirement effective July 25, 1961.

GROBY—Thomas C., Dept. 31. Seniority date April 3, 1952, retirement effective Aug. 1, 1961.

HARRIS—David F., Dept. 3-1. Seniority date Nov. 10, 1950, retirement effective July 31, 1961.

HUTCHERSON—Will C., Dept. 215. Seniority date March 26, 1953, retirement effective Aug. 4, 1961.

MEDINA—Simeon P., Dept. 14-5. Seniority date Jan. 26, 1951, retirement effective July 28, 1961.

MORROW—James E., Dept. 25-7. Seniority date Sept. 26, 1940, retirement effective July 28, 1961.

PARKER—Thomas H., Dept. 136. Seniority date Oct. 31, 1946, retirement effective July 25, 1961.

STEWART—Edmund T., Dept. 22. Seniority date Feb. 15, 1937, retirement effective July 31, 1961.

WALLER—L. Scott, Dept. 116. Seniority date March 13, 1947, retirement effective July 31, 1961.

WARD—Samuel A., Dept. 401-5. Seniority date Jan. 2, 1948, retirement effective July 28, 1961.

GD/ELECTRONICS

WIGHT—Edith L., Dept. 6. Seniority date Feb. 13, 1951, retirement effective Aug. 4, 1961.

PALMDALE

KOS—Edwin R., Dept. 324-2. Seniority date Sept. 26, 1955, retirement effective Aug. 4, 1961.

Promotions

CONVAIR

Promotions to or within supervision effective July 31.

Dept. 11-1, Contracts: To contract administrator, G. A. Lefebvre, O. H. Patterson, G. R. Vetter.

Dept. 15-6, Customer Service: To service publications supervisor, J. A. Holland. To service publications asst. supervisor, H. L. Ashton.

Dept. 188-3, Inspection, Plant 1: To inspection asst. supervisor, W. K. Baker.

Dept. 190-0, Applied Manufacturing Research: To chief of applied manufacturing research, W. E. Wise.

HOLLOMAN AFB

Dept. 313-7, Model 8 Flight Test Operations: To chief of cost control-HAFB, J. R. Martinez.

Deaths

CONVAIR

FORBES—Byron E., Dept. 120. Died Aug. 10. Survivors include wife, Elsie.

FRICK—James P., Dept. 6. Died Aug. 1. Survived by wife, Dorathe L.; two daughters, Diane and Marcia; son, James; four brothers, including Charles W. Frick of Dept. 6; one sister.

HAYS—Jessie, Dept. 138. Died July 25. Survived by husband, Willie F. Hays. Dept. 138.

KULM—Robert W., Dept. 148. Killed in auto accident Aug. 7. Survivors include father of Selby, S.D.

MARVEL—James O., Dept. 31. Died July 27. Survived by wife, Helen L.; son, Scott; mother; three sisters; two brothers.

ROOS—Robert, Dept. 146. Died Aug. 5. Survivors include wife, Jean.

GD/ELECTRONICS

SCHAEFFER—Helen, Dept. 6. Died Aug. 8. Survivors include husband, Emerson G. Schaeffer.

★ Convairiety ★

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Fort Worth Editorial Offices, Col. 72, Admin. Bldg., GD/Fort Worth, Mail Zone 0-50, P.O. Box 748, Fort Worth 1, Texas. Telephone PErshing 8-7311, ext. 2961. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck.

Pomona Editorial Offices, Room 106-D, Bldg. 1, GD/Pomona, Mail Zone 3-3, P.O. Box 1011, Pomona, Calif. Telephone NAtional 9-5111, ext. 6226/5279. Staff: James Combs Jr., news editor; Carol Colbert. Daingerfield news office, P.O. Box 947, Daingerfield, Texas. Telephone Lone Star, Texas, 2211, ext. 424.

Alaska 880-M Begins Service

(Continued from Page 1)

of Formosa took delivery of its Mandarin Jet 880-M in June as did Viasa of Venezuela. Viasa 880-M made its delivery flight via New York City to Caracas, Venezuela, Aug. 2. CAT's 880-M is operating out of Taiwan, Taipei, to Far Eastern points.

First of five 880-Ms going to Japan Air Lines was accepted by the Japanese line the middle of last month and shakedown for the second JAL Convair airliner was Aug. 4. Both planes are due to go to Tokyo by the end of this month. The third is slated for delivery the latter part of next month.

Federal Aviation Agency and Swissair were due to receive their 880-Ms the middle of this month. Three Swissair flight crews have been checked out in Convair jet transports. The 880-M was ready for customer acceptance and departure for Zurich, Switzerland, by the end of last week.

Going with the Swissair 880-M were A. P. Wilson, GD/Convair pilot, and Ludy Knudsen, flight engineer. Both will remain at Zurich a month to assist in training. Knudsen then will go to Scandinavian Air System base at Stockholm, Sweden, to assist in SAS crew training until the end of the year.

After FAA accepts its 880-M, the plane will go into pilot training and auto-pilot checkouts for a three-week period. It probably will be flown to the Oklahoma base by the middle of September.

Jet Customer Flight Training

(Continued from Page 1)

were A. J. Bolster and J. E. Smith, flight instructor/pilots; O. W. Bryant, equipment specialist; Bob J. Hightower, laboratory general mechanic; M. E. Russell, air carrier operations inspection, Seattle; F. P. Lawrence and Don Burnworth, flight evaluation; Lloyd T. Robinson, flight engineering specialist; Glen H. Schroeder, chief flight engineer; Richard Lamprecht, pilot, Oklahoma training center; and F. B. McCullough, flight engineer.

T. F. Copeland, director of flight training, New York, headed the American Airlines personnel. Registered in the formal training course were: R. L. Bisbee, superintendent ground school programs; G. F. Doll, senior flight engineer, N.Y.; W. W. Estridge, W. S. Forbes, F. M. Nehlig, H. E. Walls, first officers and instructors, flight equipment; C. M. Howick, superintendent dispatch, N.Y.; R. G. Jacobson, W. R. Keller, J. C. McNelis, J. H. Schmautz, Jack Turkel, instructors, flight equipment; W. P. Moran, superintendent flying training, N.Y.; A. R. Neal, senior flight engineer; L. J. Spaar, equipment specialist; W. R. Paul Surbaugh, staff manager aircraft operation; R. E. Yoder, senior flight engineer, Chicago.

Hernan Muniz of Lima, Peru, an accident investigator for Aircar Engineering International, Inc., Washington, D.C., and several American Airlines men based at San Diego took advantage of the 990 course at the same time.

DONORS URGENTLY NEEDED FOR AUG. 24 AS BLOOD 'IN RED'

An urgent call is out to all GD/Convair first-shift people at Plant 1, with the exception of engineering, experimental, and GD/Electronics, to help replenish the division's blood credit supply.

Cards are in the hands of supervision throughout the plant for sign-up to the next bloodmobile, Aug. 24.

Ken Wulfemeyer of employee services said that GD/Convair is in debt by 50 pints to the San Diego Blood Bank, with at least another 100 pints needed to carry through until the next collection. "We need blood, and badly."

Every available donor is asked to turn out to put Convair in the black again. Bloodmobile will be located in the military conference room, Bldg. 4, from 10 a.m. until 2 p.m.

Ken Smith Named To Marketing Post

(Continued from Page 1)

a post in General Office sales and contracts. In 1956 he was appointed manager of long range planning at Pomona and served there until he again returned to San Diego, this time in the military relations role.



HOMEWARD BOUND—Alaska Airlines stewardesses, Jeff Baehr, Dona Killeen, Martha Mahony, wave good-bye from Alaska Airlines Convair 880-M as it takes off from San Diego on delivery flight to Seattle home base.

Material Dept. Leading Housekeeping, Safety

Material department at General Dynamics/Convair is leading all division departments in both housekeeping and safety standings for the first half of the year.

It topped the field by winning scores in housekeeping four months out of six, and in safety, three months. W. R. Bruce directs the material functions as manager.

Tied with material in housekeeping was manufacturing control (Dept. 192) under V. F. Cernuto, chief. Next in good housekeeping was field operations (Dept. 171) under W. H. Rumbaugh, with three wins out of six. Experimental, under A. B. McFarland, had two points.

Second in safety standings was Lee House's jet transport electric bench, fuselage primary, and mockup (Depts. 116, 117, 138, 139, 180) with two top scores.

General Dynamics/Electronics, which is inspected regularly by GD/Convair safety engineers, equalled the standing of the winning material department with three points for housekeeping and four for safety.

During the month of June four GD/Convair departments had perfect records in housekeeping without a single violation. They were material, Les Boring's major mate and final assembly, experimental, and field operations.

Leading the June safety standings without a doctor's case were material; jet transport electric bench, fuselage primary, and mockup; and tool manufacturing under E. H. Damarus.

HEMPHILL AGREES TO ADDRESS CLUB

Thomas M. Hemphill, GD/Convair preliminary design engineer and well-known volunteer satellite tracker, will speak to members and guests of CRA Astronomy Club this Friday night (Aug. 18).

Keith Sears, commissioner, said that all interested Convair people and their friends are invited to attend the 7:30 p.m. meeting in Gillespie Field Clubhouse. Youth Astronomy Club members also will be included.

Hemphill has become noted throughout the country for his tracking and position forecasting since the first satellite went into orbit almost four years ago.

Those attending the meeting will have a chance to gaze at the stars if weather permits. Sears may be contacted on ext. 1705, Plant 1, for details.

United Fund Donations Top Con-Trib Gifts

(Continued from Page 1)

Diego County Boy Scouts of America, $5,000; San Miguel Hospital Assoc., Inc., $5,000; Children's Hospital Society of Los Angeles, $1,140; City of Hope, $750; Crippled Children's Society of Los Angeles, $250; Foundation for Junior Blind, $300; Girl Scout Council of San Diego County, $1,000; Los Angeles County Assoc. for Mental Health, $500; Los Angeles County Bureau of Public Assistance, Dept. of Charities, $300; Salvation Army, Lancaster, $500; Salvation Army, San Diego, $1,000; Diabetes Assoc. of Southern California, $190.

Toastmasters Will Compete

Speakers of General Dynamics/Convair Toastmasters #457 will be on their mettle next Monday (Aug. 21) when they meet for an "impromptu" night.

Anything can, and probably will, happen when assignments are given on the spot without warning. Members will be called on for five-minute talks on unannounced subjects at the 6 o'clock dinner meeting in Convair executive dining room.

The next week, Aug. 28, a conference workshop will be held at the same time and place. All General Dynamics men in the San Diego area are invited to attend, said Ken Samples, president. Techniques for improving conference sessions and methods of increasing their effectiveness will be demonstrated. Educational vice president, William Durksen, at ext. 2287, Plant 1, will give information to anyone interested. Durksen is planning the special program.

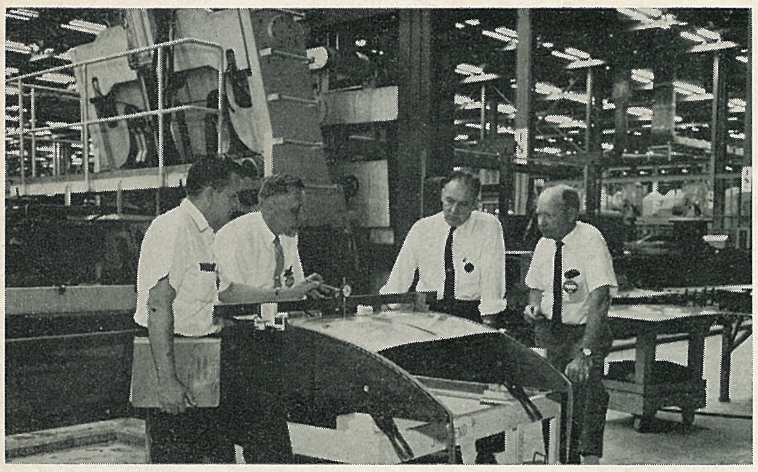
Recent events saw the GD/Convair club meeting with the College Toastmasters Club on July 31 and holding a picnic at the Astronautics recreation area Aug. 7.

The GD/Convair group is participating with other clubs of Area 5 in a contest to select the best area club. A. C. Gormish (Dept. 6), as newly-appointed Area 5 governor, instituted the first contest of its kind for the area's six clubs. Scores will be kept by each group on such items as attendance, performance, outside speeches, special events, over a six-month period. A perpetual trophy will be awarded the top-scoring group at a special banquet the last of September.

Acting Div. Counsel Appointed by Loomis

Mack P. Lovett, former assistant to the general counsel for General Dynamics in San Diego, has been appointed acting counsel for the GD/Convair Division, Robert C. Loomis, division president, announced last week.

Lovett is a Stanford University graduate and received his law degree there in 1955. He was admitted to the California bar in 1956 and is a former San Diego deputy district attorney.



AFTER ANDROFORM—A section of aluminum "skin" just removed from Androform at Fort Worth is examined on test check tool by, left to right: C. D. Lantz, manufacturing research engineer; E. L. Minch, manufacturing research and development project coordinator; R. K. May, chief of manufacturing research and development, and J. O. Snyder, AF Androform project monitor from Wright-Patterson AFB.

Giant New Machine Producing Intricately Contoured Parts

A giant machine capable of turning out intricately contoured parts in rapid order is now operational at General Dynamics/Fort Worth.

It's the Androform Model J—largest machine of its type in the world—which is already being used to manufacture B-58 stainless steel nacelle skins, aluminum fuselage skins, and other parts.

Nearly 96 feet long, the machine forms sheet metal into a variety of compound contoured shapes using a single set of adjustable cam-controlled dies called "forming elements." The machine can handle sheet metals up to 36-feet long and 8-feet, 4-inches wide.

"The Androform process is similar to creating curls in aluminum foil by pulling between the thumb and finger," said E. L. Minch, manufacturing research and development project coordinator. "The foil takes a compound contour because it is stretched more at the center than at the edge."

Angular-cut material or tapered-thickness material can also be formed to certain contours.

"Since the machine can form sheet stock in hardened condition, materials can be purchased to desired hardness and formed without extra operations," said C. D. Lantz, manufacturing research engineer.

"The regular stretch-forming process required purchasing material in soft state, then preforming, heat treating, finishing and aging in forming the part."

"The scrap rate runs less than 2 per cent because it forms with a relatively lesser tensile load," Minch said. "Parts can be reformed on the Androform machine as many as 10 times without material failure."

"Tooling is less expensive," Lantz added, "since one set of elements will form an indefinite number of contours as well as an infinite number of parts. This eliminates the more expensive types of tooling required in conventional forming methods—and produces prototype parts without a long tooling lead time."

General Dynamics/Fort Worth has an $87,000 contract with Air Force to "determine capabilities of the machine and effect on materials."

J. O. Snyder, Manufacturing and Materials Technology Division of Aeronautical Systems Division, USAF, reviewed the program at GD/FW Aug. 2 and 3.

Symposium on QC Slated in Capital

Dr. N. H. Simpson, manager of reliability at General Dynamics/Fort Worth, has been appointed a publicity chairman for the eighth annual Symposium on Reliability and Quality Control in Washington, D.C., early next year.

Dr. Simpson will serve in this post for Areas 22 and 23, which include Texas, Oklahoma, Kansas, Arkansas and Louisiana.

Among outstanding men on the symposium's advisory board is L. B. Richardson of General Dynamics Corporation.



SPECIAL UNIT—Shown before boarding plane for summer training are members of Army Reserve Special Forces unit including General Dynamics men William Morris, second from left; R. G. Button, fourth from left; Vincent Cappelletti, fifth from left; Merlyn Eckles, fifth from right, and W. R. Richardson, far right.

Guerrilla Warfare Specialists Sharpen Skill During Utah Duty

Five General Dynamics employees are members of the guerrilla warfare Special Forces detachment of the Army Reserve just completing rugged summer training in Utah.

They are Specialist William R. Richardson (Dept. 811-1) and M/Sgt. Robert G. Button (Dept. 120-4) of GD/Astronautics; Merlyn Eckles (Dept. 141) and William Morris (Dept. 192-2), both staff sergeants of GD/Convair, and 1st Lt. Vincent Cappelletti, unit executive office, of GD/Electronics.

All unit members are skilled parachutists trained in demolition, communications and medical operations. Many are linguists. In wartime, they can be called upon to instruct in guerrilla tactics.

'Chute the Chute' Designed To Empty Jetliner in Hurry

Chutes that in an emergency can evacuate 100 passengers from a jet transport in a minute and a half are being checked out at General Dynamics/Convair as they go into Convair 880-M and 990 airliners.

First proofing tests on the silver nylon evacuation slides carried on latest model Convair jet transports were made last month to see if they work as they should, and to pass FAA certification. Every one of the slides installed on all Convair jet transports (four to a plane) will be released from its package, inflated, demonstrated and repacked before plane delivery, said J. S. Breeden of GD/Convair furnishings group of engineering. Breeden, with E. W. Jackson (Dept. 6), is responsible for current slide tests.

Type of slides going into 880-Ms and 990s was developed jointly by Convair engineers and the manufacturer, Air Cruisers Division of Garrett Corp., Belmar, N. J. Although they are of the same general type as those already in Delta Air Lines and Trans World Airlines 880s, these have a fabric center slide section between twin tubes. Present design is considered more durable.

"The evacuation slides provide a safe, quick, and efficient means of emptying a plane in any kind of emergency situation," Breeden pointed out. "It takes but a flash—10 seconds —to inflate them and just a second for each person to chute to the ground."

The fast means of disembarkation comes in handy when a plane settles down in soft ground, Breeden cited as an example where it would be difficult to wheel steps up to exits. Also, the slides, with hand grips along the sides, could serve as emergency life rafts.

They are stowed in small compartments beside each exit, already hooked to fittings. Cabin attendants are responsible for releasing them when necessary. Complete instructions at each point of installation simplify operation. The slide compartment door is opened; two adjustable 100-in. straps hooked to fittings inside the exit; slide pushed out doorway; handle pulled to release compressed air for inflation.

Each airline customer decides on the kind of evacuation slides to be used. Those ordered for 880-Ms going to Civil Air Transport, Japan Air Lines, Alaska Airlines, FAA, Viasa, and Aerovias Brasilia 990s are non-inflatable single fabric sheets. These are held solidly at the bottom by a crew member. Manufactured by Hoover Aircraft Properties of Miami, Fla., they have the advantage of short repacking time. They can be put back in place in five minutes, while it takes about an hour to restow the inflatable type.

Swissair and SAS 990s, Delta 880s will use two of each kind. Swissair 880-Ms and American Airlines 990s will be equipped throughout with inflatable slides at each of the four exits.





COMING DOWN—E. W. Jackson and J. S. Breeden (kneeling in upper photo), both of GD/Convair furnishings, watch evacuation slide unfold from door of Swissair 880-M during qualification test. "Arm" hooking strap belongs to M. D. Castle (Dept. 160). Below, J. A. Johnson, former GD/Convair engineer, takes a slide from mockup on type installed in 880s.

Social Security Change Permits Retiring at 62

People nearing retirement and all wage earners at General Dynamics Corporation divisions will be affected by changes in Social Security laws now in effect as of Aug. 1.

Men may now choose to retire at any age between 62 and 65 with decreased benefits. A man retiring at 62 will receive 80 per cent of the monthly benefit he would receive at 65.

Minimum monthly payment has been increased from $33 to $40. Widows' benefits have been raised by 7½ per cent to 82½ per cent of husbands' benefits.

Under the new law, earnings of retired people have been extended. They may now earn up to $1,700 a year with $1 withheld for each $2 earned over $1,200.

Coverage test has been liberalized so that anyone in covered employment for one out of each four quarters since 1950 is eligible for Social Security benefits. Previously, persons were required to be in covered employment one out of three quarters.

All wage earners covered by Social Security will notice an increase in paycheck deductions after Jan. 1, 1962. Social Security tax rate for both employees and employers will increase to 3⅛ per cent each on the first $4,800 earned.

Detailed information is available from employee services at all on-site locations. Those at off-site bases and facilities may contact their industrial relations representatives.

Study Contract Involves Designs Of Nuclear-Powered Spacecraft

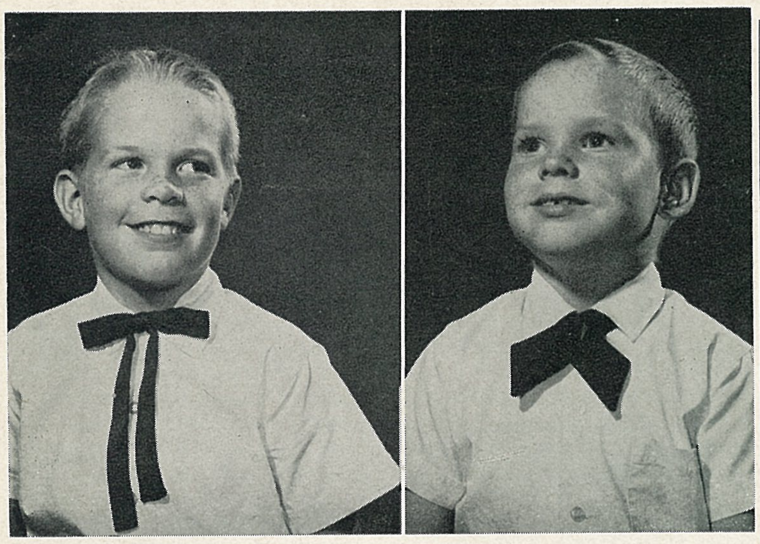
General Dynamics/Astronautics and Fort Worth personnel will join in a six-month study contract for design of a nuclear-powered spacecraft for the Saturn launch vehicle.

The contract was awarded to GD/Astronautics by National Aeronautics and Space Administration's George C. Marshall Space Flight Center at Huntsville, Ala., director of the Saturn program. Three other firms received similar contracts. Each of the four amounts to about $75,000.

Dr. James H. Guill, an authority on reactor engineering and nuclear flight programs, will direct the effort.

GD/Astro has already conducted extensive studies on operational nuclear rocket configurations. Recently completed was a study on the Reactor-In-Flight-Test (RIFT) vehicle for NASA.

Astro is also conducting studies of nuclear launch vehicle stages with up to 12-million pounds of thrust for the Marshall Space Flight Center.



APPEALING—It's no wonder that John Sanderson, 7, right, and his brother, Gil, 9, were chosen for cast of "Music Man" production at Fort Worth's Casa Manana. Ever see a more appealing pair? They are sons of T. G. Sanderson of FW's Dept. 21-5.

Freckled Youngsters Score Hits In Musical Shows at Fort Worth

Show business has bitten the two young sons of a General Dynamics/Fort Worth family—with happy results.

The boys are John and Gil Sanderson, whose father, T. G., works in Dept. 21-5. They had important roles in two recent Casa Manana productions, "Wizard of Oz" and "The Music Man."

John, 7, starred as Winthrop Paroo in "Music Man." Gil, 9, was his understudy, and also was in the cast as one of the River City kids.

Only vocal training the boys have had was two years in a youth choir at St. Stephen Presbyterian Church.

"We took the boys to Casa's first show of the season ("Calamity Jane") and John remarked he'd sure like to be up there on the stage," their dad recalls.

By coincidence, a few weeks later the notice came out that kids would be auditioned for "Wizard of Oz" and "Music Man."

Of the 1,000 youngsters auditioned, John and Gil were among the 40 selected.

John sang in the last two performances of "Music Man" despite fever, and won the applause of the cast as a real trouper.

Casa Director Mike Pollock gave him a cornet at the end of the show's run for his excellent performance.



LOOK OUT BELOW!—Henry Lee Black of GD/Astro force at Schilling AFB "takes a dive" during workout with Jayhawk Sky Divers Club. No novice, Black has jumped more than a score of times, chiefly with Los Angeles club, before assignment to Kansas base. Jayhawkers meet Sunday afternoons at Dukelow Ranch near Monroe, Kan.

General Dynamics Men Chosen For University of Cal. Faculty

Twenty-three General Dynamics men will be on University of California Extension faculty as fall semester of school rolls around again.

Registration for fall programs in the San Diego area began last week with most classes to start the week of Sept. 18.

Instructors from GD/Convair will be: John J. Harton, senior dynamics engineer; Kenneth C. Hendershot, senior thermodynamics engineer; David B. Medved, senior staff scientist; James P. Mitchell, senior research engineer; Theodore Rubin, senior staff analyst; Herbert T. Wexler, engineering staff specialist.

Those from Astronautics are: Howard W. Donovan, design specialist; Carl G. Erickson, senior electronics engineer; Raymond A. Ezekiel, management development specialist; James J. Fithian, electronics engineer; Edward M. Getzoff, lead engineer; Ernest A. Hamilton, electronics engineer; James F. Haskins, staff scientist; K. Leon Montgomery, research engineer; W. Duane Montgomery, staff scientist; Cyril H. Nute, test engineer; Conway C. Sams, senior research engineer; Philip J. Swanson, group engineer; Bruno F. W. Witte, senior research engineer.

Three experts from General Atomic on the list are James H. Alexander, assistant chief of mathematics and computing; Ward C. Sangren, chief of mathematics and computing; and Rudolph W. Preisendorfer, mathematician.

William C. Slagle, senior electronics engineer, is with Information Technology Division of GD/Electronics.

Is It News?
Call Convairiety

Key Men Drill In Installing Escape Capsule

When installing and removing B-58 escape capsules becomes a routine flight-line function — probably in the near future — Dept. 63 employees at General Dynamics/Fort Worth probably will have the technique down pat.

They're rehearsing the procedure these days in a 20-hour course offered by educational services section.

"Live" hardware used consists of an early-model capsule, borrowed from Stanley Aviation, and the B-58 wooden mockup located northwest of the plant.

A portable dolly shuttles the 300-pound capsule to the plane. The capsule is then raised by electrically driven hoist.

Once "airborne" and over first station, the capsule is lowered into position on ejection rails.

During maintenance work inside the station, the capsule can be raised about 48 inches via detachable extension rails.

"This enables crewmen to perform necessary maintenance functions inside the crew station without removing the capsule entirely," said Hoyt Clark Jr., educational services supervisor.

Installation for second and third-station capsules involves the same steps. Connecting the pilot's stick is an added step in installing the first-station capsule.

A separate 20-hour capsule familiarization course for those in Depts. 58, 64, 78, 7-6, 6 and for certain Air Force personnel, is also being offered, leading up to the day when capsules will be placed on all production B-58s.

"These capsule courses are proving timely," one supervisor pointed out, "since the only previous experience in installing and removing capsules was during static ejection of a capsule from second station of Hustler No. 2."

Clark said that production-type hardware is now being used to teach a 40-hour course on the active defense system, and a 100-hour course on the mobile tester.

Also recently acquired were oscilloscopes for testing signal flow of transistor circuits. The equipment is used in courses on transistors and servomechanisms.

Convair Treasurer On Retired List

Glenn T. Bovee, long time Convair treasurer, is retiring, effective July 31.

Bovee entered the aviation field in 1937 in the accounting department of Vultee Aircraft. He was controller for Vultee and later held similar responsibilities for Consolidated Vultee.

MILDRED RUSSOM WEDS AT VEGAS

Mildred K. Russom of Dept. 14 at GD/Convair was married Aug. 1 to Austin C. Erwin, civilian employee at North Island NAS. The wedding took place at Las Vegas, Nev. Mrs Erwin has been in shipping department, now at Rose Canyon, since 1950.



LOTS OF LOOCKS—Carl Loock, GD/FW Dept. 8, and wife, left, operate well-shaded backyard practice diving rig for their three youngsters—all outstanding divers. That's Cal on "trapeze," Vicki in maneuver on trampoline, Christine in harness on diving board. Vicki, 13, is 1964 Olympic hopeful with 23 firsts in Texas and Southwest meets. Cal, 11, has placed in 18.

"Dry Dock Diving"

Backyard Flips by Trampoline Keep Loock Family in Trim

When the Loock family of General Dynamics/Fort Worth isn't winning diving laurels, its well-tanned members are practicing this precise aquatic art in their own backyard at 610 Club Oak.

Carl Loock, project industrial engineer, built the practice rig, used for "dry dock diving" during the seven-month off season.

It consists of a six-by-nine-foot trampoline; a regulation diving board which extends over the edge of the trampoline; and a wooden framework housing a rope-and-harness "trapeze" set-up.

"We use the diving board to practice form, timing, balance and control," Loock said.

"The trapeze setup enables the kids to practice back and forward flips," he pointed out. Loock controls the rig from the sideline with a set of ropes.

The Loocks practice virtually every afternoon from middle of September through mid-May, the off-season in Fort Worth for swimmers. But during the regular season, the Loocks practice their diving didoes daily at various pools.

Year-round practice sessions are paying off for the Loocks, who boast at least one 1964 Olympic hopeful — 13 - year - old Vicki.

A veteran of 37 top-flight meets, Vicki has garnered 23 first-place medals in Texas and the Southwest area. Some of her more impressive wins have come this year: Southwestern Indoor AAU junior division; Oklahoma Oil Capitol AAU title; State TAAF girls championship; Texas AAU open intermediate title; Southwestern AAU Junior Olympics, intermediate; and second place in the women's division of Southwestern AAU meet.

"Vicki will definitely be an Olympic contender if she continues to improve," Loock opined. And he thinks Cal, 11, might some day try out for an Olympic berth.

Placing in 18 of the 20 meets he has entered, Cal has won 11 Southwestern age group and Junior Olympic events for young boys.

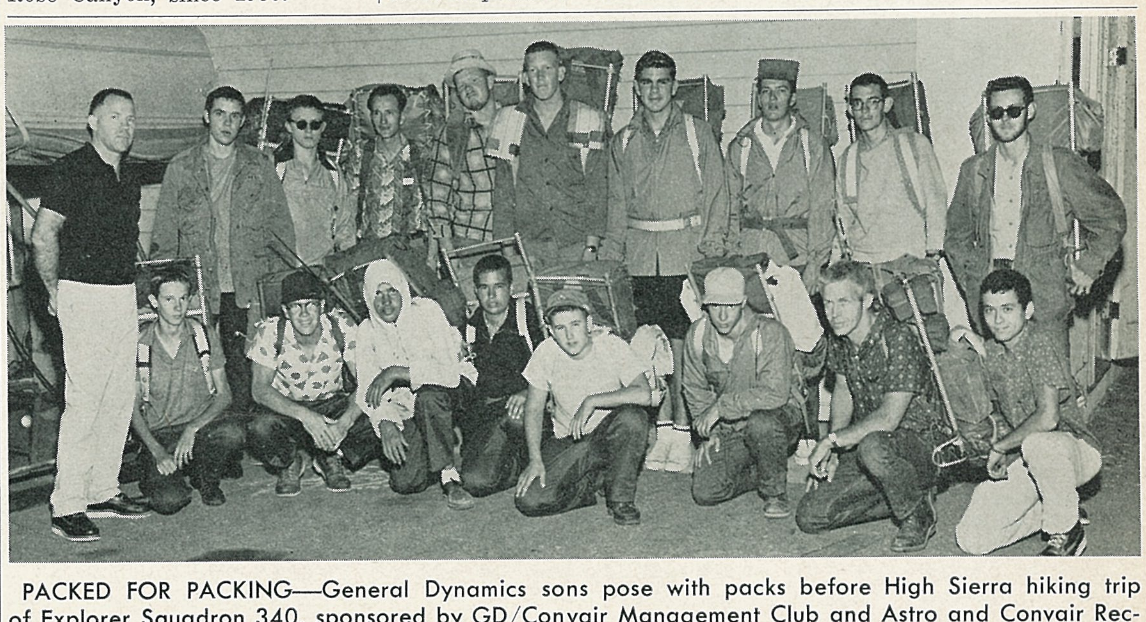
This year he placed second from the high board in the State TAAF finals for boys 17 and under.

But seven-year-old Christine may some day outdo them all. She's won four medals in six meets to date.

Loock's been active in diving since 1931, when he won the South Dakota intercollegiate diving title while a student at Dakota Wesleyan University.

He's won a variety of state and regional meets, including the North Central Open, Rocky Mountain and Southwestern AAUs, and the TAAF titles. He placed second in the State TAAF meet only last year.

Mrs. Loock, a registered nurse and Red Cross water safety instructor, serves as assistant coach and trainer.



PACKED FOR PACKING—General Dynamics sons pose with packs before High Sierra hiking trip of Explorer Squadron 340, sponsored by GD/Convair Management Club and Astro and Convair Recreation Associations. Boys will cover 100 miles of John Muir trail on two-week trek, Aug. 4-20. Climb up 14,000-ft. Mt. Whitney, trout fishing in uncharted streams, lakes, will highlight rugged mountain trip. At far left in above shot is Gene Boyd (GD/Convair-Dept. 197), adviser.

GENERAL DYNAMICS CORPORATION NEWS

General Dynamics Corporation, created in April, 1952, as successor to Electric Boat Company, is composed of 11 divisions and a Canadian subsidiary, Canadair Limited, of Montreal, aircraft.

The divisions are:

General Atomic, San Diego, Calif., nuclear research, development, production.

General Dynamics/Astronautics, San Diego, Calif., missiles and space systems.

General Dynamics/Convair, San Diego, Calif., aircraft, research and development.

General Dynamics/Pomona, Pomona, Calif., missiles.

General Dynamics/Fort Worth, Fort Worth, Tex., aircraft, research and development.

Electric Boat, Groton, Conn., submarines.

Liquid Carbonic, Chicago, Ill., carbon dioxide producer, industrial, medical gases.

Electro Dynamic, Bayonne, N.J., electric motors, generators.

Material Service, Chicago, Ill., building materials, concrete products, coal.

General Aircraft & Leasing, Washington, D.C.

General Dynamics/Electronics, Rochester, N.Y., Los Angeles and San Diego, Calif., telecommunications, electronic equipment.

★ ★ ★

The nuclear-powered Ethan Allen, biggest missile submarine ever built, went into commission in ceremonies at Electric Boat, August 8.

The 6,000-ton, 410-foot submarine is the first of a new class of A-subs designed to fire the longer-range 1,500-mile Polaris missile.

Under-Secretary of the Navy Paul B. Fay Jr., speaking at the commissioning, termed the Ethan Allen "a triumph of science and engineering."

Rear Admiral George N. Wales, commandant of the Third Naval District, formally placed the ship in commission. Also participating in the program were Vice Admiral Elton W. Grenfel, Commander of the Atlantic submarine force; Carleton Shugg, Electric Boat president; and the Ethan Allen's blue and gold crew skippers, Captain Paul L. Lacy Jr., Dallas, Tex., and Commander W. W. Behren Jr., Harrisburg, Pa.

Yesterday (Aug. 15), Electric Boat laid the keel of the nuclear-powered attack submarine Greenling in another ceremony.

* * *

Seaboard World Airlines initiated scheduled Canadair CL-44 trans-Atlantic jet-prop cargo service with the arrival at New York International Airport last month of the first of its fleet of swingtail CL-44s. The flight originated in Frankfurt, Germany.

Seaboard has ordered five of the CL-44s. The planes have a capacity of 65,000 pounds of freight and a cruising speed of more than 400 miles per hour.

* * *

Employee discounts ranging from $29.95 to $160 have been announced for the new line of Stromberg-Carlson stereo high fidelity consoles manufactured by General Dynamics/Electronics.

In the new "Young America" series, a contemporary mahogany stereo phonograph can be purchased by employees for $170. Retail price is $199.95. There are five other models in the series, ranging up to $380 for employees ($495 retail).

In the "Presidential" series, five models range in price from $460 to $535 for employees ($595 to $695 retail).

Under the employee purchase program, an employee must present a purchase certificate to an authorized dealer at the time of purchase. Certificates are available at division employee services offices.

Accountants Tour Jet Line

Over 100 members of National Association of Accountants from the San Diego area visited the General Dynamics/Convair plant on their semi-annual industrial tour the first of this month.

J. D. Milling, manager of accounting at GD/Convair, addressed the group on accounting problems in industry. D. C. Burrows, GD/Convair controller, welcomed accountants at a dinner in the Convair cafeteria.

Following a tour of the Convair jet transport flight line, movies of the F-106 and 880 jet airliner were shown in Bldg. 14 auditorium.

More than half of those attending the specially-arranged evening were General Dynamics people from Astronautics, Convair, GD/Electronics, and General Atomic divisions.

Dr. Steurer Named To Material Board

Dr. W. H. Steurer of General Dynamics/Convair has been named a member of the national Materials Advisory Board for a four-year term.

Dr. Steurer, chief of engineering materials at Convair, is the only General Dynamics Corporation representative among the 20 materials experts from industry throughout the United States who make up the board's membership. His recent appointment was announced by the National Academy of Sciences, Washington, D. C., to which the Materials Advisory Board reports through the National Research Council.

He has served the last two years as chairman of one of the board's panels, aircraft and astronautics applications.

Dr. Steurer joined Convair in the fall of 1958 to head up the materials technical group.

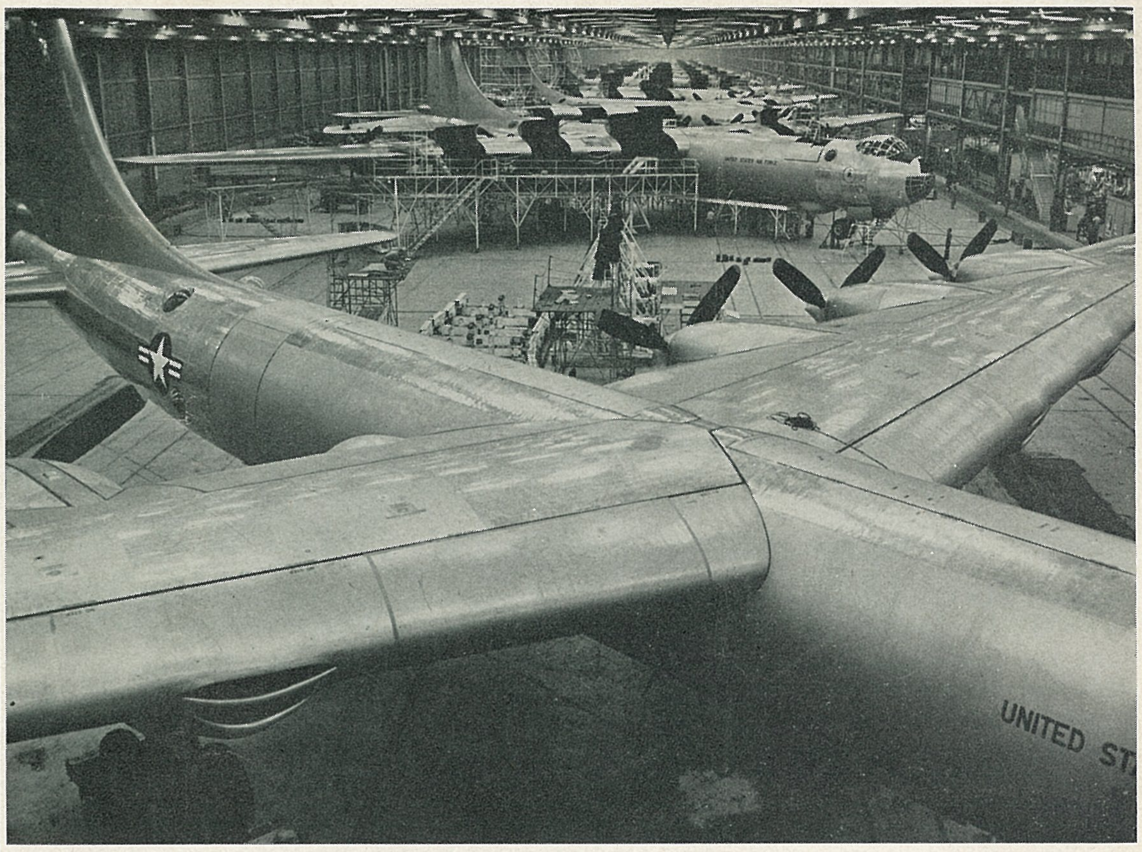
GD/Pomona Awarded Two Studies For AF

Two contracts were awarded last month to General Dynamics/Pomona by the U. S. Air Force.

One was a $90,000 contract for design study of a track comparator simulator. The other was an $86,000 contract for study of airport landing services.



PLANT TOUR—J. D. Milling, GD/Convair manager of accounting (standing left), welcomes Ross Kingsbury, SD chapter president, National Association of Accountants, during Aug. 2 visit of organization to GD/Convair plant.



CONTROVERSIAL—Early years of B-36 production at Fort Worth were marked by bitter controversy. But program went forward, regardless. Here is view of mile-long assembly line. Towering tails make a tight fit.

Under Fire

B-36, Unscathed in Military Career, Fired Upon Plenty From Home Base

(Following is No. 65 installment in continuing history of Convair aircraft.)

At this stage of its development (1947) the B-36 was not yet entirely secure. The Boeing B-50 (a B-29 souped up with R-4360 engines) was faster, though lacking in range. The jet medium bombers were coming along. For a time Gen. George C. Kenney, chief of SAC, belonged to the dissenting Air Staff minority. (He felt that the B-36 might have a better future in aerial tanker and anti-submarine service. Later he became the bomber's strong advocate.)

The plane's performance was steadily improved, however, and history took a hand in the summer of 1948. Top Air Force officers met with Air Secy. Stuart Symington June 15 to begin a final evaluation of the bomber program. While these sessions were under way Russia clamped a tight blockade on West Berlin, creating a crisis so grave that two U.S. bomber groups were placed on alert. The Symington conference ended June 25 with a unanimous decision to go ahead with the intercontinental B-36.

Through fiscal 1948 the B-36 had been financed with wartime funds. For fiscal 1949 Congress voted appropriations predicated on rebuilding the Air Force to 70 groups. (At the time there were 59. Plans called for procurement of 5,309 planes over the next three years.) Events that followed drew the B-36 into the center of an inter-service controversy.

To carry out an Administration economy program, President Truman and Defense Secy. Louis A. Johnson put the Air Force under a 48-group ceiling in the fall of 1948 and imposed similar curbs on Army and Navy planning. The 70-group program collapsed. With the next few months contracts totaling more than $300 million were terminated (including those for the Northrop B-49 "flying wing," the North American B-45 medium bomber and the Boeing B-50). Concurrently the B-36 schedule was stepped up on recommendation of Lt. Gen. Curtis LeMay, new commander of SAC. In January, 1949, a senior board decided to order 39 more B-36s for $172 million, and in March approved an additional order for 36. Convair as a result was receiving an expanding share of a shrinking defense dollar.

While these events were taking place a rebellion was simmering among top Navy officers who feared that two clubs — economy and the Unification Act — were being used to reduce the naval air arm to nullity. These convictions were strengthened in the spring of 1949 when Johnson (who happened to be a former Convair director) abruptly cancelled construction of the super-carrier USS United States. Soon the House Armed Services Committee began an investigation of rumors that B-36 contracts had been awarded through favoritism or collusion, and that the bomber itself was worthless, an easy prey to Navy jet fighters.

A parade of government and industry witnesses cleared up the charge to everyone's satisfaction. A civilian aide whose "black paper" had set off the investigation publicly recanted. Chairman Carl A. Vinson announced in August that the committee had found no evidence whatever of fraud, collusion, influence or favoritism.

The merits of the B-36 itself continued to be debated when the hearings were reopened that fall, to investigate defense policies and unification problems. The best remembered critical phrase is Adm. Arthur W. Radford's. He described the bomber as vulnerable and ineffective, "a billion dollar blunder." (In retrospect, a Radford quotation that came closer to the Navy's position was this: "The B-36 has become . . . a symbol of a theory of warfare, the atomic blitz . . . Many reject this theory.")

In rebuttal, the Air Force marshaled its top voices — Arnold, Kenney, Vandenberg, LeMay — and Army Gen. Omar Bradley, chairman of the Joint Chiefs of Staff, sided with them. The hearings adjourned without an immediate verdict. (Formal findings the following March stressed the committee's belief that each service knew best what weapons it needed to discharge its mission, whether bombers or ships. Special indignation was voiced over cancellation of the super-carrier.)

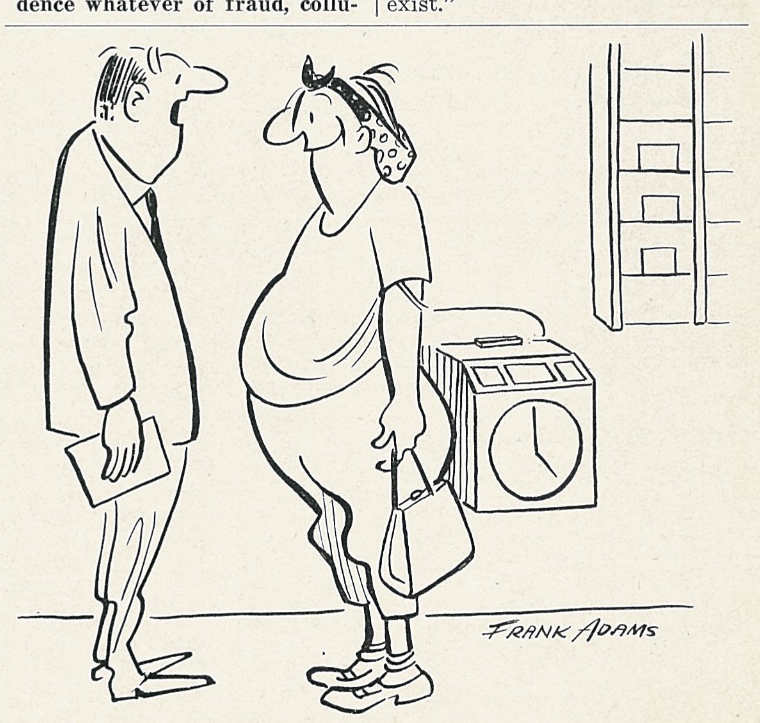
Prevailing opinion when the hearings ended appears to have been summed up by Hanson Baldwin, New York Times military writer. He observed that the B-36 lacked the speed of such newer planes as the jet B-47, "but range, its great asset, cannot be shrugged off . . ." He concluded that "as an aerial force-in-being . . . the B-36 justifies its existence; as long as any potential enemy has an atomic bomb such a force must exist."

Twin Cities Will Hear About SAC and B-58

Malcolm Holloway, administrative assistant in FW Dept. 2-5, will accompany Strategic Air Command officers to Minneapolis Aug. 31 for a special conference with civic, business and government leaders in the Minneapolis-St. Paul area on the mission of SAC and the B-58.

A radar bomb scoring site for B-58s soon will be in operation in the area.

Holloway will describe the B-58, and the sonic booms residents can expect. He will also show the documentary movie, "Tall Man Five-Five," which depicts an imaginary B-58 bombing mission.



"Going home so soon, Mrs. Smith? I was about resigned to your working overtime."



ALOHA—General Dynamics travelers step from Pan American DC-7 at Honolulu airport to start CRA-sponsored tour. Of group, 50 were from GD/Convair, 37 from GD/Pomona.

CRA Calendar

(Convair Recreation Association has some 40 activities in operation. For information on Convair sports, call CRA headquarters, ext. 1245, Plant 1.)

★ ★ ★

AEROMODELERS — Now reorganizing, call CRA headquarters, ext. 1245, Plant 1.

ASTRONOMY — Meeting Aug. 18, 7:30 p.m., Gillespie Field Clubhouse.

BOWLING—Register now for winter leagues. For information call Jim Hayman, ext. 1155.

BRIDGE CLUB—Weekly sessions every Tuesday, 7:30 p.m., Barcelona Hotel, 326 Juniper St.

COIN CLUB — Meeting Aug. 17, 7:30 p.m., Convair cafeteria executive dining room.

DELTA DIVERS—Family dive Sunday (Aug. 20). Meet at Diving Locker, Pacific Beach, 9 a.m. Business meeting Tuesday (Aug. 22), 7:30 p.m., Room 3, Conference Bldg., Balboa Park.

FISHING CLUB—Family potluck picnic Saturday (Aug. 19) Pecan Park, 6-10 p.m. Joint Convair and Astro all-day fishing trip for underprivileged children Aug. 26, El Capitan Lake.

GOLF—CRA plant championships, Circle R, Sept. 9-16-23. Register until Aug. 25 by calling ext. 1705, Plant 1.

GUN CLUB — Amateur Trapshooting Assoc. registered shoot Aug. 20, 9:30 a.m., Gillespie Field range. Merchandise shoot Aug. 27.

MODEL RAILROAD — Meetings each Friday, 7:30 p.m., House of Charm, Balboa Park.

MOVIES—Reduced price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB — Next shoot Aug. 27, 9 a.m., San Diego Police Pistol Range, Federal Blvd. and Home Ave.

RADIO CLUB — Meeting tomorrow (Aug. 17), 7 p.m., Harbor Drive headquarters.

ROLLER SKATING — Convair skate night Aug. 21, Skateland, Front and G Sts. Free tickets at employee services.

SPORTS CAR CLUB — Weekend motorcade to Santa Barbara, Sept. 2-3. Meeting followed by driving event Sept. 6, 7:30 p.m., Natural History Museum, Balboa Park.

WATER SKI CLUB — Skiing Aug. 19 and 26, 6:30-9:30 a.m. at Santa Clara Point; 9:30 a.m. to 1 p.m., Tierra del Fuego. Sunday skiing 9 a.m. until 1 p.m. off Tierra del Fuego, Aug. 20, 27. Business meet and evening skiing Aug. 24, 5:30-8 p.m., Santa Clara Point, Mission Bay.

WOMEN'S ACTIVITIES—Registration open now at employee services for all Convair women, wives, teen-age daughters to beginning charm school starting Sept. 20. Call ext. 1245, Plant 1.

EL CAMINO SIGNED FOR GOLF SWEEPS

Entries for the Aug. 26-27 Convair Golf Club sweepstakes set for El Camino are being taken by Juanita at Astro ext. 1158.

In the Dark

Father-Son Team Triumphant As Drivers Wheel Blindfolded

Blindfolded drivers snaked their sports cars through a circuitous route laid out on the San Diego Zoo parking lot at the Aug. 2 gymkhana for Sports Car Clubbers of Convair.

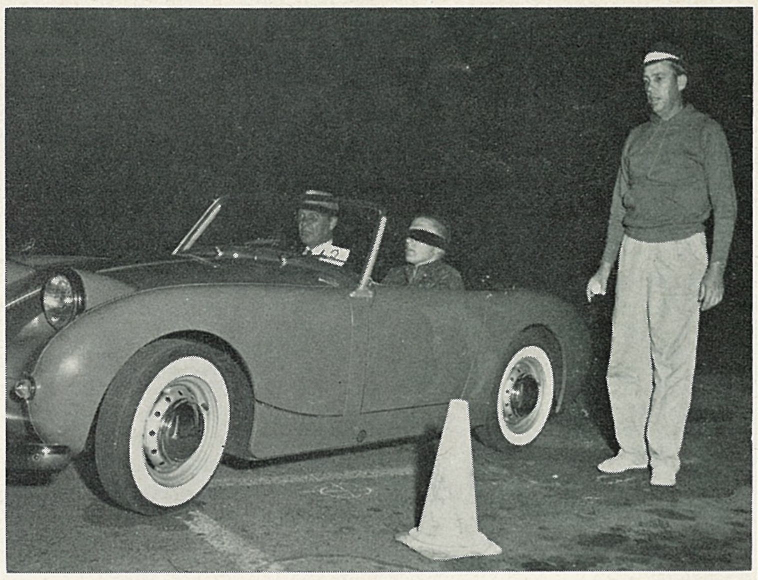
Twenty cars crawled over the devious course with best time chalked up by a father-son team, C. G. "Bud" Farnsworth (Dept. 190-2) and son, George. With Farnsworth at the wheel, blindfolded, and George navigating by touch signals, they maneuvered the 125 feet in 2:24 minutes without knocking over a single pylon. Reversing positions, they scored third with 4:16 minutes.

Duane Tubbs (GD/E Dept. 9), assisted by his wife Carol, came in second with a time of 3:35 minutes. Their three penalties for toppling markers added 30 seconds to their time.

Lou Barnes (GD/E Dept. 5), as program chairman, was responsible for the complicated pattern circling the 100-ft. lot. Drivers were required to drive from corner to corner, park in and back out of marked-off spaces, and weave in and out of pylons as they crisscrossed to the finish line.

Barnes said that another test of driving skill will follow the Sept. 6 meeting in the Natural History Museum, Balboa Park. A short business session at 7:30 p.m. will precede the event at the Zoo parking lot.

A holiday weekend will see Convair sports car drivers going en masse to the annual Santa Barbara races Sept. 2-3. Dick Perkis (Dept. 97-5), chairman, has reserved 20 rooms at El Prado Motor Motel at $14 for double accommodations. Club members and their guests will gather early Saturday morning at the Convair executive parking lot to form the motorcade up the coast. Anyone wishing information may call Perkis in the evening at AT-4-3733.



BLIND DRIVING—George Farnsworth strains to drive straight course despite blindfold as father, C. G. Farnsworth (Dept. 190-2) navigates silently. Pair placed third with son driving, first with father at wheel. Pacing car is Lou Barnes (GD/E Dept. 5), chairman and field judge of CRA Sports Car event.

Model Plane Activity Scheduled For Revival

A call is out for all aeromodelers at GD/Convair to join in reactivation of the CRA group.

Ted Sanford, commissioner, urges all Convair modelers wishing to take part in organized meets and competition to indicate their interest. A regular schedule of meetings will be set up as soon as possible and monthly contests planned.

First event announced by D. T. Larsen (Dept. 15), acting president, will be a tri-club meet some time in September. Convair Aeromodelers will vie with Astro Modelers and San Diego Orbiteers in a contest at the Kearny Mesa flying site, off Hwy. 395, north of Clairemont Mesa Blvd.

Eighteen trophies for first, second, third will be given in six divisions: A/2 glider, A/1 glider, hand-launch glider, ½A gas, unlimited gas, and unlimited rubber.

All former and new members are asked to contact CRA headquarters, ext. 1245; Nat Antonioli, ext. 2673; Walt Mooney, ext. 2311; or Larsen, ext. 2289, all at Plant 1.

Convair and Astro Sales Days Listed

Saturday sales days for General Dynamics employees at salvage yards at GD/Convair and GD/Astro are:

GD/Convair — Aug. 19 and Sept. 2.

GD/Astro—Aug. 26 and Sept. 9.

Circus Tickets For $1 Go on Sale Tomorrow

Convair and Astronautics families will be viewing "The Greatest Show on Earth" at reduced CRA prices when the circus comes to town next month.

Discount tickets to the Sept. 14 showing of Ringling Bros. and Barnum and Bailey Circus go on sale tomorrow morning (Aug. 17) at 9 a.m. at employee services. Price is $1.

All seats in the 8,000-capacity Westgate Park will be filled by General Dynamics people with the entire stadium bought out for the Thursday night performance. All seats are reserved and will be sold on a first-come, first-served basis. Show time is 8 p.m.

Four all-new spectacles will be seen at the 1961 edition of the circus. They are a nautical aerial ballet, an outer-space spectacle, elephantine display, and patriotic finale.

Hazardous aerial acts, performing bears, tigers, lions, dogs, horses and camels, balancing and tightwire acts, high trapeze thrillers, and clown shenanigans will entertain the crowd.

Winter Bowling Leagues Form

Leagues are being formed for winter keg play at Convair, announced Jim Hayman, CRA commissioner.

Twelve leagues for day-shifters, three for night-shift bowlers, with over 150 teams altogether, will start rolling at San Diego alleys the first week in September. All day-shift leagues start at 6:30 p.m.

Two leagues, Wednesday night 750 Mixers, already filled, and Thursday night handicap league, will bowl at the new bowling alley, Frontier Lanes, recently opened on Midway Drive.

Convair bowlers may contact the following for spots on plant teams:

Monday, Clairemont Bowl: Don Walin, ext. 1437, Plant 1.

Monday, Bowlero, Mission Valley: Terry Burke, ext. 2357, Plant 1.

Tuesday, University Lanes: Hawley Skilton, ext. 1437, Plant 1.

Tuesday, Bowlero (handicap): Bob Heath, ext. 2794, Plant 1.

Tuesday, Bowlero (engineering scratch): Bob Johnston, ext. 2381, or Windy Weller, ext. 2274, both Plant 1.

Wednesday, Pacific Recreation (mixed scratch and handicap): Jim Hayman, ext. 1155, Plant 1.

Thursday, Victory Lanes: Frank Colianna, ext. 2424, Plant 1.

Thursday, Frontier Lanes (handicap): Jim Hayman, ext. 1155, Plant 1.

Friday, Clairemont Bowl: Bill Moreland, ext. 1286, Plant 2.

Friday, Tower Bowl (regular scratch league): Mike Brooks, HO-9-8793.

For swing-shift leagues, call Brooks.

Hines, Ramsdell Lead Linksmen

Tied for low gross scores in the Aug. 5-6 CRA golf sweepstakes at Coronado were Wayne Hines and Dick Ramsdell who shot 75s on the par 72 course.

A 78 by "Curly" Maxfield was runner-up in the 0-14 handicap bracket. Low nets in this category were tallied by E. Henderson and E. L. Williams with 63 each, and Bob Vones with 64.

In the 15-21 class, low gross cards were turned in by S. Tomiako, Bob North and Lila Fisher with 87, 89 and 90 respectively. A pair of 70s by T. Wagner and J. Murphy led E. Risner's 71 for low net.

George Kobets with 89 led low gross scoring for golfers handicapped at 22 and over, followed by D. Fletcher with 90 and E. Muklevicz with 91. Low net scores in this class were shot by E. Fountain (64), V. Mavrinac (67) and D. Spencer and Lee Kuhn with 68 each.

Two Golfers Hole Out On Short Par Threes

A couple of "aces" shot recently on short courses were as good as a "trip to the mountains" for two GD/Convair golfers.

Jack Matthews of still photo lab, who's been trying the game only a few months, scored his hole-in-one on No. 14 (100 yards) at Presidio Hills Golf Course.

Ken Eastin of the high speed wind tunnel had his thrill at Colina Park Golf Course when he knocked a wedge shot 75 yards into No. 2 hole.

Tickets to Musical Offered at Bargain

Convair theater-goers may purchase reduced-price tickets to the next Circle Arts Theatre production tomorrow morning (Aug. 17) at 9 a.m. at employee services.

Special night for Convair people is Sunday (Aug. 27) to "Plain and Fancy," musical featuring Margaret Whiting.

CRA prices are $2.75 for $3.40 seats; $2.20 for $2.75; $1.80 for $2.25 and $1.40 for those selling for $1.75.

Discounts Offered On Last Wed. Game

Exchange tickets for the last Wednesday home game of the Padres' season will be offered Convair ball fans next Monday (Aug. 21) at employee services. They will be good for 75 cents discount on any seat at the Aug. 23 game with Honolulu at Westgate Park.

200-lb. Sea Bass Speared by Diver

Convair skin divers and their families will join in a family event Sunday (Aug. 20) at a location yet to be announced.

All Delta Divers and anyone else interested in skin diving may join the group at 9 o'clock that morning at the Diving Locker in Pacific Beach, said Harry Ruscigno, CRA commissioner.

The following Tuesday (Aug. 22) members will hold a business meeting in Balboa Park's Conference Bldg., Room 3, at 7:30 p.m. Underwater movies will be shown.

A trip to the Coronado Islands over the weekend of July 29-30 drew 18 divers. Yellowtail, white sea bass, and sheepshead were speared. Best catch was a 200-lb. black sea bass brought up by Jack Carpenter.

The CRA club's newly-acquired 16-ft. skiff was due for its shakedown cruise last weekend. It will be used for short off-shore excursions and is large enough to transport half a dozen divers and equipment at one time. It will prove a welcome addition to the group's equipment, said Ruscigno. Other articles available for members' use are aqua lungs and an underwater movie camera.

Beginners' Coins Will Be Featured

Beginning coin collectors will be favored at the coming CRA Coin Club exhibit Aug. 17 in the Convair cafeteria executive dining room, 7:30 to 10 p.m.

All displays will be limited to a face value of $10 to give starting members a chance to show their collections, said Al Baber, president. A film on copper coinage will be shown after a short business meeting.

Drawing for a 1961 proof set, coin auction, and refreshments will complete the evening's program.

Sports & Recreation

Harry Ruscigno, Veteran Diver, Will Head Club

Harry Ruscigno will head CRA skin diving activities at Convair with his appointment as commissioner of Delta Divers by J. K. Field, chief of employee services.

An enthusiastic skin diver who has been perfecting his diving skill since high school days, Ruscigno has been a member and officer of the CRA club the last four years. He has directed it as president for two years, following a term as treasurer.



Harry Ruscigno

A native of San Jose, Calif., he was charter member of one of the first skin diving clubs in the country, the San Jose Barbs, formed in 1949. He has since explored waters up and down the Western coast, from Kodiak, Alaska, to Guaymas, Mexico, and taken part in many regional and national meets. As a member of a Delta Divers champ team last year, he competed in the 1960 National Spearfishing Championships at Laguna Beach.

Ruscigno said he finds skin diving so rewarding that he has given up all of his former sporting activities, hunting, fishing, flying, to devote his entire spare time to diving. He dives at least once a week the year around, usually accompanied by his wife, Lillian, who enjoys snorkeling while her husband is diving far below. Even the four young Ruscignos are being taught the rudiments of the sport as they get old enough. First to learn the fun of snorkeling is Stephanie, 8, while Jeffrey, 4, Valerie, 3, and even five-month-old Jack go along on seaside outings.

At present the CRA club has 50 active members with scheduled activities for family participation.

Ruscigno joined Convair in 1957 as a structural research and development engineer.

Gun Club Plans Shoot Aug. 20

The joint GD/Astro and GD/Convair Gun Club will hold an Amateur Trapshooting Association-registered shoot at Gillespie Field at 9:30 a.m., Aug. 20.

First event is 25 pairs of doubles, followed by 100 targets at 16 yards and 100 at handicap distances.

The joint activity's annual Hunter's Merchandise Shoot will be held Aug. 27 at Gillespie Field, with a variety of events to prepare shooters for the hunting season. A number of prizes will be awarded.

Jack Swank, CRA commissioner, has announced that the club range will be closed Labor Day weekend because of the opening of dove season. Further information on the club and its activities is available from Swank, GD/Convair ext. 1161, Plant 1.



WATER SPRITE—Bettejean Shelton (Dept. 6) is caught expertly skimming Mission Bay waters on one ski by Convair lensman O. W. Rollins during recent CRA skiing event. In lower shot, getting CRA boat ready for spin are (from left) Gene Sevigny, CRA commissioner, in driver's seat; Gene Laird of industrial engineering; Bill Meier, now of Astro; Herb Wexler, Dept. 6; and Don Stacey, Dept. 101.

Fees For Water Skiing Dropped For 'Bonus Day' Saturday, Aug. 19

A "bonus day" of free sking for Convair Water Ski Club members will be held during scheduled hours this Saturday (Aug. 19) in Mission Bay, said Commissioner Gene Sevigny.

The usual charge of 25 cents a mile to take care of gas and oil for the boat will be eliminated for CRA skiers during the Saturday skiing sessions. They will be from 6:30 to 9:30 a.m. off Santa Clara Point and then off Tierra del Fuego until 1 p.m.

The same schedule of skiing is set for the following Saturday (Aug. 26), but at the regular fees.

Sunday skiing will be from 9 a.m. until 1 o'clock off Tierra del Fuego the next two weeks, Aug. 20 and 27. All members will turn out for evening skiing and a business meeting Thursday (Aug. 24) at Santa Clara Point, 5:30 p.m. to 8 p.m.

Anyone interested in learning the sport is invited to join the CRA group during any of the scheduled skiing events, said Sevigny. Instruction will be given in the fundamentals of skiing at any time.

For information on CRA water ski activities call Commodore Herb Wexler, ext. 2366, or Sevigny, ext. 1032, both Plant 1.

BIG CRAPPIE LEADS JULY FISH CATCHES

Prizes won by Convair anglers for July catches will be awarded Aug. 19 at Pecan Park when Fishing Club members gather for a 6 to 10 p.m. potluck dinner and program.

CRA Commissioner R. W. Menzie reported that first place went to W. H. Reed, Dept. 144, for a 2-lb., 8-oz., crappie (70.2 per cent possible points), with Donald Murphy, Dept. 31, second with a 22-in. rainbow (68.75 per cent), and W. C. Bowen, Dept. 188, third with a 31-lb., 2-oz., albacore (63.8 per cent).

Other button winners for month were R. H. Feeley, Dept. 34-2, 28-lb., 6-oz., albacore; H. M. Jones, Dept. 31, 29-lb., 14-oz., albacore; Richard Summers, Dept. 400, 27-lb., 7-oz., albacore; Nick Keough, Dept. 31, 27-lb. albacore.

Ruth Menzie, AT-1-8247 can supply details on potluck.

New CRA Charm School Starts Sept. 20 at SD

GD/Convair women will be joining with women from other companies this fall in a beginning charm school course sponsored jointly by CRA and San Diego Industrial Recreation Council.

Opening session of the six-week series is Sept. 20 in Convair cafeteria executive dining room. CRA is underwriting a major portion of the cost, said Martha Woodberry, CRA commissioner for women's activities and coordinator for the school. Reduced cost to Convair women, wives, and their teen-age daughters over 14 will be $9 each.

Classes will be held each Wednesday evening 7-9 p.m., taught by Edith Antelline, who has conducted all such courses at Convair for the last several years.

Fundamentals of good grooming, diet and nutrition, figure analysis, posture, business and social etiquette, make-up and hair styling, as well as basic wardrobe tips will be explained and illustrated.

All Convair women interested in starting the fall season with a fresh personal viewpoint are urged to sign for the classes as soon as possible. Enrollment is limited to 40, but new classes will be organized to take care of all who register.

Registrations and enrollment fees are being accepted at Convair employee services, Plants 1 and 2, and in the office of Virginia Cannon at Rose Canyon, R.C. ext. 2125.

Convair Eagles Win 'A' League By Topping NAS

Convair Eagles downed Naval Air Station in a perfect play-off tilt last week to win the Industrial A League title.

Three-hit pitching by Jim Speck and no-error play by the Convair ball club blanked NAS, second-round winner, 4-0.

Eagles had taken the first round by half a game to qualify for the play-off last Tuesday night. As top team of the league it will play in the 80-team City League post-season tournament opening this week on city playgrounds.

With two out in the first inning of the Tuesday play-off, Curt James got a base hit to right field, stole second and scored on an infield fly hit by Charles Vanderhoof and dropped by the NAS catcher. This run was all Jim Speck needed as he pitched perfect ball the first four innings.

NAS was in there strong until the 6th when the Eagles got to them for three more runs. Base hits by Vanderhoof, John Evans, George Cooper, Les Phillips and Speck pushed in the scores. Naval Air Station only managed once to get more than one man on base in any inning.

★ ★ ★

Rose Canyon was still leading shop softball play at GD/Convair with five wins, no losses, as the second round went into its final stretch.

It still had to meet Dept. 135 and Electronics, both pushing near the top of the heap. Electronics had a record of four wins, two defeats, and one game left, while Dept. 135 had a chance in its two remaining games to emerge second-round victor. Dept. 135 had only dropped one game so far to Dept. 400, 12-11.

Dept. 137 had four-won, two-lost as final play goes into its last week. It will meet Dept. 97 Friday night, 6:45 p.m. Dept. 400 and Dynamics will play the last game of the season the same night at 8:20 p.m., both at Cabrillo playground.

Dept. 400 and Material both stood 3-2 and two games to go; Dept. 97 was trailing with a 1-4 standing.

Winner of the second half of shop softball will meet Dept. 137, first-half champ, in a best two-out-of-three series, for plant championship. Play-off games will be Aug. 21, 25 and 28, all 8 p.m. at Cabrillo playground. Spectators are welcome to attend.

UNDERPRIVILEGED CHILDREN GUESTS ON DAY OF FISHING

More than 150 underprivileged children will have the thrill of hooking their own fish during a full day of angling Aug. 26, courtesy of GD/Convair and Astro Fishing Clubs.

Youngsters will be selected from San Diego Boys' Club, National City Girls' Club, San Diego Children's Home, Neighborhood House, and Nazarath Home.

They will be taken to El Capitan Lake at San Vincente to try their luck for crappie, bass, bluegills, bullheads. Convair and Astro Fishing Club members will supervise and provide tackle.

Any other men who would like to take part in the annual event may leave names and extensions at CRA headquarters, ext. 1245, Plant 1. No boats will be used this year, as all fishing will be from the lake shores or floats, said R. W. Menzie, Convair CRA commissioner. In charge of Astro arrangements is T. B. Field, Astro commissioner.

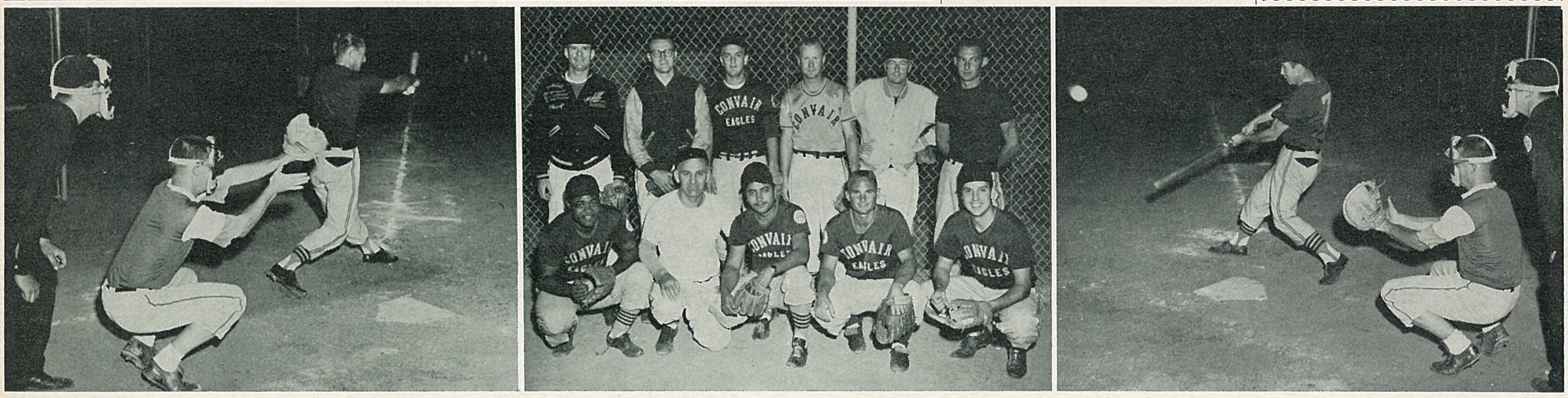
Davidson Bros., who operates vending machines at Convair and Astro, and Prophet Co., operator of plant cafeterias, will pick up the tab for refreshments and sack lunches provided for the children.

Registration Open For Championships

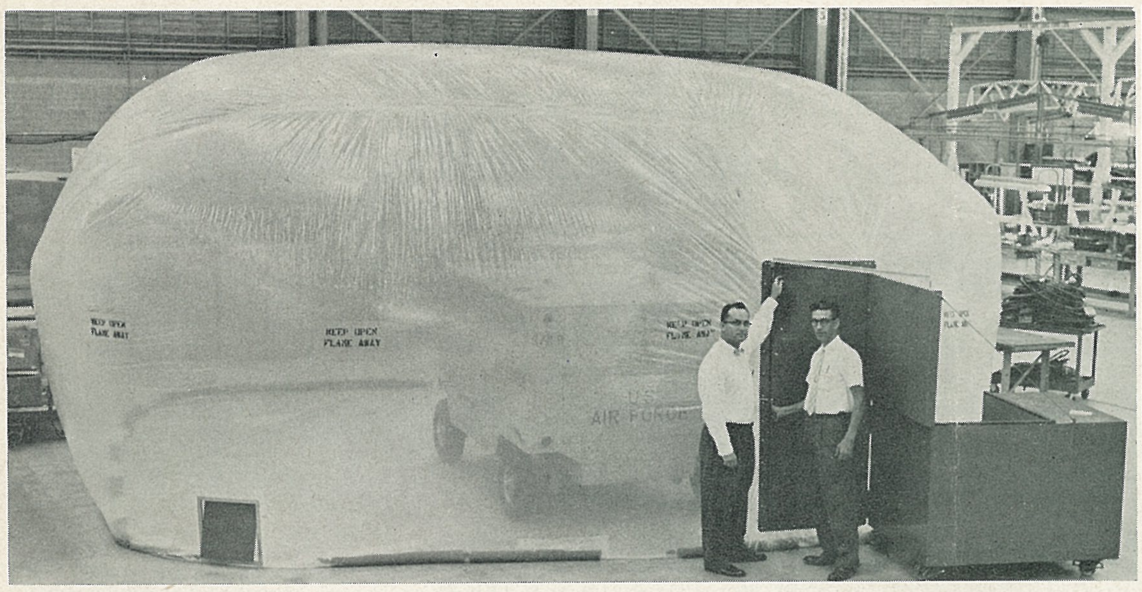
Registration opens today (Aug. 16) for Convair plant golf championships scheduled next month at Circle R.

Linksmen will compete in match play over three weekends, said Ken Wulfemeyer, CRA commissioner. Tournament days are Sept. 9, 16, and 23.

Entries will be accepted until Aug. 25 at ext. 1705, Plant 1.



GETTING HOT—Convair Eagles, first-round winner of Industrial A Softball League, winds up second-round play by downing Electro Instruments, 5-1, in Aug. 1 tilt. In shot at left, Catcher Norman Dahl mitts pitched ball as Electro Instruments batter takes hefty swing; at far right, Dee Trepanier of Convair nine, is set to knock out one as pitch comes in. Team members (center) are, left to right, bottom row: George Cooper, Manager Dean Hoffman, Chris Benivente, Charles Vanderhoof, Dee Trepanier. In top row (left to right) are: Les Phillips, Jim Speck, Norman Dahl, John Evans, Curt James, Gordon Heardburg. Missing are George Hargrove and Jim Reichert. Eagles blanked Naval Air Station in championship play-off game last week, 4-0, for league title.



DUST-FREE BUBBLE—J. E. Davis, left, and J. R. Wise, of FW's tooling department, stand beside plastic bubble they erected to provide dust-free area for electronic equipment.

'Transparent Tent,' Inflated in Jiffy, Provides Mobile Dust-Free Area

A giant plastic "bubble," anchored with sand bags, may answer the need for a dust-free area for working with delicate electronic instruments.

That's a theory of FW tooling engineers, who recently designed and are testing such a bubble. When inflated, it encloses an area 18 by 20 feet, is 11½ feet high.

The bubble is a single, complete unit that includes the plastic (mylar-laminated polyethelene), an aluminum door, damper assembly, a small cart for moving the equipment easily to any area where it's needed, filters, and an air blower.

It's the air blower (powered by a one-half horsepower motor), that does the job of inflating the bubble and keeping it up while technicians work inside it. The blower forces air through specially-designed filters.

After it's blown up, the bubble is soundly anchored inside by small cylindrical sand bags. Deflated, the unit requires only a three-foot cube in the cart for storage. The aluminum door attached to the plastic folds for ease in storage.

At first, engineers thought inside temperature might be a problem. However, an initial test saw the temperature rise only three degrees in two hours in the enclosed area—to 80 degrees as compared with the 77-degree average maintained in the factory.

In the first test, it took two men only 16 minutes to inflate and anchor the plastic "work area," surrounding a mobile tester used in checking out B-58 subsystems. The unit was deflated, folded and stored in only nine minutes.

All components of the test unit were put together in-plant.

Said Howard J. Lee, a tooling supervisor in Dept. 24-9 who conceived the idea:

"We're not absolutely sure it's the answer. But we hope it's possible, and for a relatively small cost."

Lee recently read an article in a magazine about a plastic greenhouse. It occurred to him that a similar structure might be practical in aircraft manufacture.

J. E. Davis, 24-3 tool engineer, and J. R. Wise, 24-3 test tool designer, collaborated on specific plans.

Lee envisions possibility of refrigerating the filtered air to provide working comfort outdoors in hot weather, and a possible device to dehumidify the air inside the plastic, when necessary.

Davis is of the opinion that for use inside the factory, the polyethelene used in the test model is suitable. But for similar units to be used out-of-doors, he believes polyethelene with aluminum would be better.

"It would deflect the sun's rays," he explained, "and provide shade for the workers inside."

CONVERSION B-58S ON FLIGHT STATUS; NO. 26 GIVEN TEST

Production conversion Hustler No. 26 zoomed successfully through its Air Force acceptance flight Aug. 4, and its delivery flight to Carswell AFB is expected momentarily.

Two other conversion B-58s are on company flight status. No. 21 was almost ready for the first Air Force acceptance flight at press time.

No. 27 is being company flight-tested, and next month is the target date for its Air Force acceptance flight.

Air Force crew members on No. 26's successful acceptance flight were Capt. T. H. McMullen, pilot; Maj. George Dibble, second station; and M/Sgt. F. E. Pulley, third station.

The Hustler's Air Force flight followed a company sortie by E. E. Guthrie, pilot; W. R. Denton, second station; and N. C. Stranberg, third station.

A fourth ship, Hustler No. 22, will also be run through the production conversion cycle. Now in use at Edwards AFB by the Air Force for performance demonstrations on the two-component pod, the ship will be returned to General Dynamics/Fort Worth around the first of the year, when conversion work will begin.

Water Pressure 'Blows' Bulkheads For Space

Bulkheads of unlimited size for space vehicles of tomorrow are seen as one application of a low cost, high efficiency forming process, using water pressure, developed recently at General Dynamics/Astronautics.

The highly-flexible method known as "decoction forming" was conceived by John Berg, applied manufacturing research and process development (Dept. 290-2). Although under study for only four months, the technique has already been tested successfully with a variety of sheet metals and even plastic at GD/Astro's Point Loma test site.

Typical of the simple and inexpensive tooling used in decoction forming is that developed by Berg, D. F. Kraatz (Dept. 290-2) and Dale Kuhlman (Dept. 565-4) for early experiments.

This consists of a six-foot circle of boiler plate with a fitting for a one-inch water line in the center. A sheet metal blank is laid on this "tool plate" and fastened around its circumference by bolting on a boiler plate "tool ring."

Water is fed under the blank through the tool plate fitting at pressures from 65 to 250 pounds per square inch. In a short time —from less than a minute to almost an hour depending upon the nature of the part being formed —the blank swells up to form a hemispheric "bubble" with a skin thickness nearly equal at all points.

Thus far thickness variation in the finished article has been held to .004-inches, and later work is expected to bring this within .001-inch tolerances.

"As our techniques develop we will expand testing from the stainless steel and aluminum alloys of early experiments to more exotic materials," said Berg. "Water as the forming medium will be replaced by other fluids for use at temperatures ranging from 400 degrees below zero to 2,400° F."

Outlets in the tool plate to allow circulation of the liquid during forming will provide temperature control for later tests.

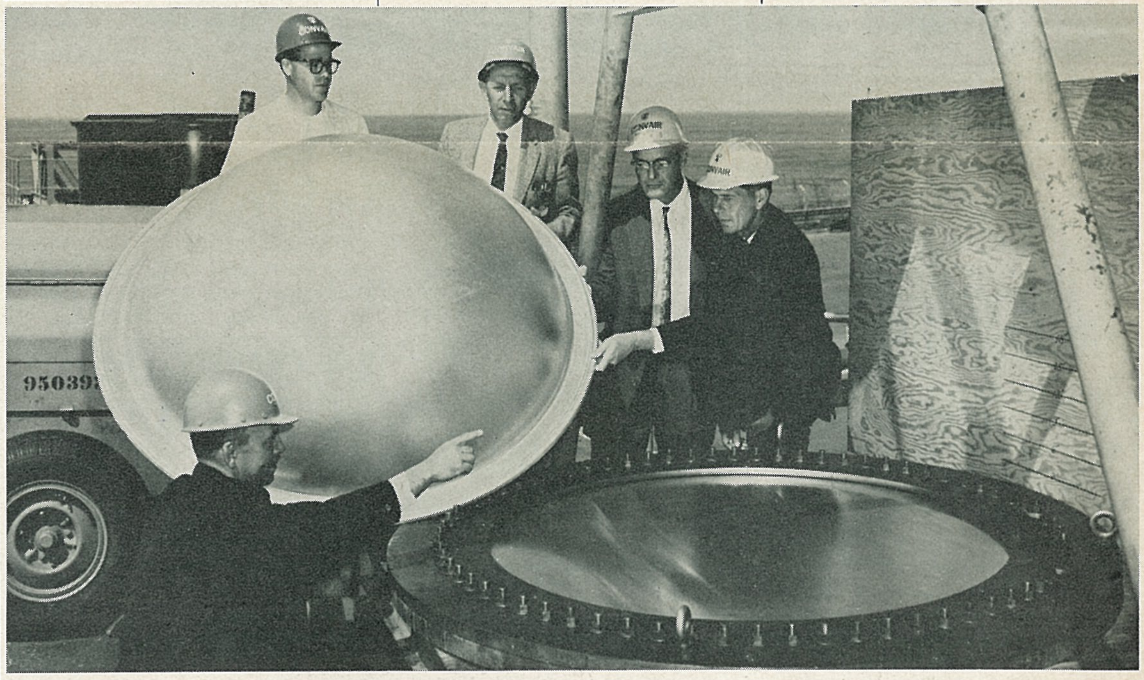
While present studies emphasize the hemispheric shape, elaborately curved articles can be made by placing a lightweight "cavity" over the blank to limit expansion during forming.

"The decoction process suggests a wide range of new applications, all possible using quickly produced and inexpensive tooling," concluded T. A. Herbert, manufacturing research supervisor. "Enormous shapes — even 'king-size' bubble buildings—are not inconceivable using GD/Astro's new forming technique."

GD/FW Son Accepted For Flight Training

Joe R. Brinkley, son of M. C. Brinkley, General Dynamics/Fort Worth Dept. 74 painter, has been accepted for Navy flight training.

Young Brinkley is a graduate of Weatherford High School and North Texas State College. He recently was flown to the Pensacola, Fla., "Annapolis of the Air," where he is in pre-flight training. He is due an ensign's commission in four months, when his flight training will begin.



BEFORE AND AFTER—Examining completed hemisphere beside new blank ready for "decoction forming" in tool ring at right are John Berg, of GD/Astro, who conceived technique; Dale Kuhlman and Hank DeKleine, who assisted; T. A. Herbert, manufacturing research supervisor, and V. G. Mellquist, manager of manufacturing research.

F-102 Squadron in Japan Passes Year Without Maintenance Break

Convair F-102s charged with air defense of southern Japan have achieved an enviable record of combat readiness with the 68th Fighter-Interceptor Squadron, Itazuke Air Base, Japan.

Not one of the 25 Convair jet interceptors attached to the 68th has been grounded during the last year, ending June 30, 1961, because of breakdown in maintenance and supply. In fact, they had gone well over a year—452 days—without a black mark.

The last time the unit had to ground a plane for parts was March 31, 1960, just three months after receiving their first F-102s, according to a report from Hdqrs. Pacific Air Forces, USAF. And the last date an F-102 was idle because of a shortage of supplies was April 18, 1960. It also topped AF squadrons using F-102s in June.

Lt. Col. Marvin W. Miller, commander of the 68th, credited teamwork for the squadron's accomplishment, "We owe a lot to the men who maintain and supply our aircraft in such a skillful manner."

Heading Itazuke's maintenance and supply technicians are Lt. Col. Amos E. Waage and Maj. Arnold E. Zimmer, supported by GD/Convair field service representatives, H. C. Hattel and T. C. Larson. Hattel and Larson are assigned to the Far Eastern area under Convair's Rudy Haas, field service area supervisor.

Major Zimmer, base supply officer, counts more than 30,000 line items on hand to maintain aircraft in Itazuke's arsenal. Besides F-102s, these include F-100s, C-47s and H-19 helicopters. There are 14,500 line items in stock for F-102s alone.



LONG STREAK—At left, Maj. A. E. Zimmer, 68th FIS base supply officer, and Robert Spear, F-102 weapons system materiel officer, watch Lt. Col. A. E. Waage point to 452-day combat readiness record of F-102s based at Itazuke AB, Japan. In center A/2c James M. McAllister, crew chief, checks drag chute, step in careful maintenance. At right, SM/Sgt. Andy E. Rametta, 68th FIS line chief (left) confers with crew chief, A/2c McAllister, as supply expediter, M/Sgt. Roy E. Hall, waits for decision on items he will order to keep F-102 flying. Convair F-102s went to Far East squadron first of last year.

GD GENERAL DYNAMICS

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Convairiety

Vol. 14, No. 18 — Wednesday, August 30, 1961

Convair EDITION

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SAN DIEGO, POMONA, ANTELOPE VALLEY, CALIF. — ASTRONAUTICS OFF-SITE BASES, FORT WORTH, TEX.

GD/Convair Working On NASA Contract For Space Engine

A research program on feasibility of using electric propulsion engines to propel vehicles through deep space is under way at General Dynamics/Convair under a contract from National Aeronautics and Space Administration.

The contract, in the amount of $98,264, calls for studies over a period of a year in GD/Convair's physics section. Dr. A. E. S. Green, chief of physics, said the experiments will be conducted under direction of Dr. Ralph Lovberg, at GD/Convair on leave from Los Alamos Scientific Laboratory.

Research is expected to lead to design of engines, known as electric or ion propulsion or magnetohydrodynamic, operating on the principles of plasma propulsion. Experiments are now in initial stages with a new plasma propulsion coaxial gun designed by GD/Convair physics experts and recently installed in the physics laboratory, Bldg. 51.

Thrust force for electric propulsion engines is achieved by applying powerful magnetic pressure to minute quantities of ionized gas in an accelerator chamber. The magnetic pressure accelerates the gas and expels it at high velocity from the exhaust end of the chamber, thus creating thrust.

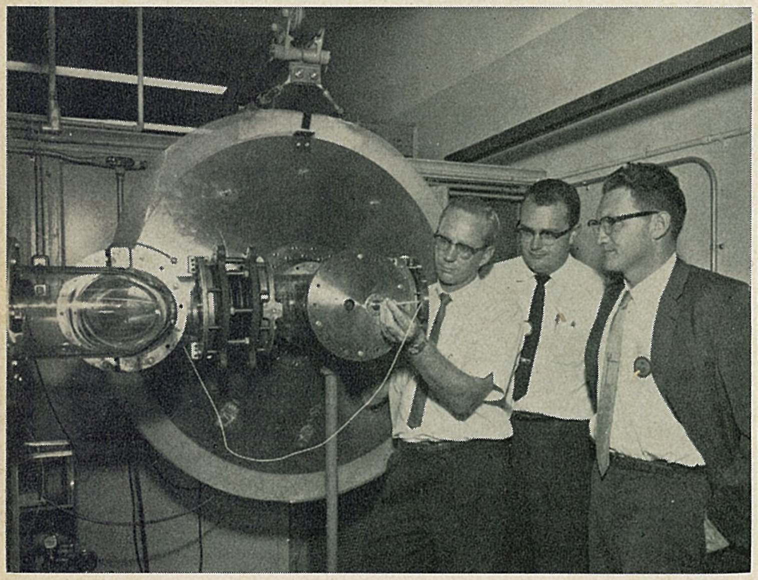
Engines operated by plasma propulsion would be used to propel satellites already in orbit, explained Lovberg, who pointed out that the thrust produced would not be sufficient to propel a vehicle from the surface of the earth but would be adequate for deep space missions starting from orbit.

An advantage of such propulsion is that it requires only about one-hundredth of the amount of propellant needed by a chemical fuel engine to accomplish the same mission.

A variety of gases—hydrogen, helium, argon, and nitrogen—will be used in the experiments.

Dr. Lovberg is a recognized expert in the plasma field, said Dr. Green. He holds degrees of B.S. in physics from the California Institute of Technology and Ph.D. in physics from the University of Minnesota. There he researched in design and construction of a 70-Mev (million electron volt) proton linear accelerator. Since 1955 he has been with Los Alamos Scientific Laboratory concentrating on plasma diagnostics in connection with controlled thermonuclear power.

He came to GD/Convair early this year as a visiting scientist to head up plasma propulsion research in the physics section which, under Dr. Green, has been developing its electric propulsion program since July, 1960.



RESEARCH "GUN"—Dr. Ralph Lovberg holds probe which determines electric current flowing through new plasma propulsion gun in GD/Convair physics lab. Looking on are Bruce Hayworth of physics section (center) and Dr. A. E. S. Green, chief of physics.

Convairiety's Name To Become 'GD News'

As soon as design and mechanical problems are ironed out, Convairiety will change its name to "General Dynamics News." This possibly can be accomplished by the following issue of Sept. 13.

The new heading will better reflect the publication's role in serving more than one division, and will be more in line with organizational changes affecting company nomenclature. The publication will continue to serve readers in different communities with editions emphasizing local news.

Swissair Jets Slated to Fly Zurich-Tokyo

August deliveries of Convair jet transports may top all previous months for number of basic 880s and 880-Ms submitted to airline customers at General Dynamics/Convair.

Already accepted and flown away during the month were the two Swissair 880-Ms, now at Zurich, Switzerland, getting ready to go into passenger service.

First Swissair jet left San Diego Aug. 11 and was at Arlanda, Sweden, for flight crew training before returning to the main airline base at Zurich.

Swissair's second 880-M left the San Diego flight line a week ago Sunday, on Aug. 20, to make the longest nonstop flight so far achieved by a Convair jet transport. It made the delivery flight from New York to Zurich, a distance of 3,855 miles, in six hours, 57 minutes.

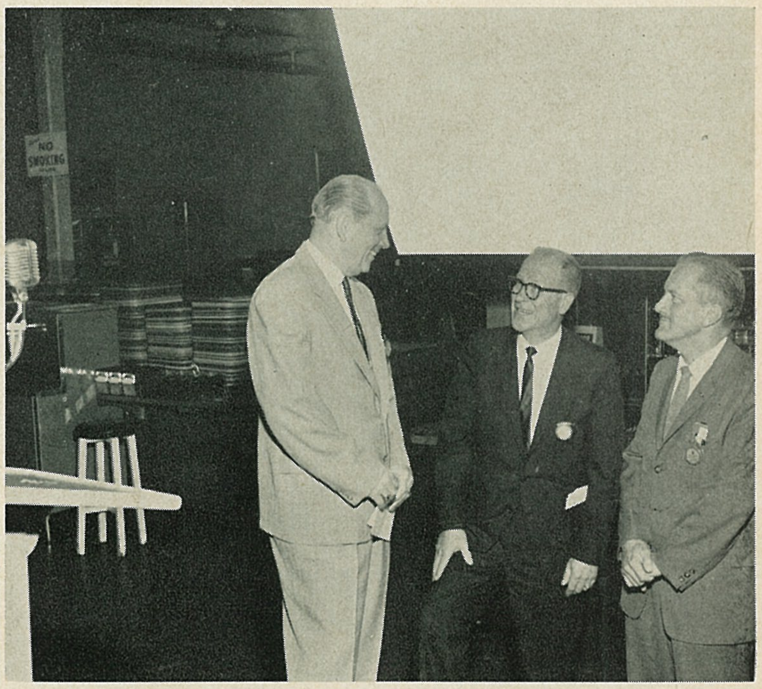
Both of the Swissair Convairs will go into service three times a week between Zurich and Tokyo.

Stops are scheduled at Geneva, Cairo, Karachi, Bombay, Bangkok, Manila on one route; Geneva, Cairo, Karachi, Calcutta, Bangkok on the second; and Athens, Beirut, Karachi, Bombay, Hong Kong on the third.

Middle East flights to Cairo twice weekly and Zurich to London flights also are scheduled for the Convair jetliners.

Trans World Airlines took delivery on and flew away another of its basic 880 jet transports Aug. 10 with another scheduled to go to TWA in the near future.

(Continued on Page 2)

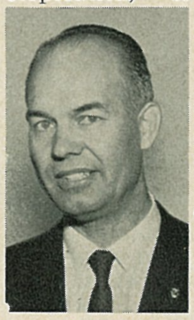


WELCOME ABOARD—J. H. Famme, now general manager of GD/Convair in addition to vice president, introduced Robert A. Neale, center, new manager of operations, and B. J. Simons, right, new chief engineer, to supervisors at cafeteria meeting last week.

Loomis Assigned To Airline Tasks; Famme is Manager

R. C. Loomis, president of General Dynamics/Convair, last week was assigned to devote his full attention to airline contracts and negotiations.

"This is a top-priority program of the greatest importance to the corporation," C. Rhoades MacBride, executive vice president, commented. The assignment relieves Loomis from administrative burden and will permit concentration on commercial negotiations.



R. C. Loomis

At the same time, J. H. Famme, GD/Convair vice president, was given the additional title of division general manager and Famme appointed Robert A. Neale, formerly of Canadair Limited, to become manager of operations for GD/Convair.

E. R. Peterson, vice president-research and engineering, will head a special projects research group, reporting to MacBride.

To head division engineering personnel (commercial jet program, F-106, F-102, subcontract efforts, etc.) Famme appointed Bernard J. Simons as chief engineer, and John S. Bergstrom as assistant chief engineer.

Famme also appointed Frank

(Continued on Page 2)

McClure Named GD Director of Quality Control

Appointment of J. Y. McClure as General Dynamics director of reliability and quality control was announced this week at San Diego by Edward J. Williams, senior vice president-manufacturing.



J. Y. McClure

McClure, who will assume his new duties Sept. 1, has been manager of quality control at General Dynamics/Fort Worth since April, 1951. He will report to Williams.

A native of Georgia, McClure attended the University of Southern Illinois, the University of California and the Curtiss-Wright Technical Institute. He joined Convair in 1935 at San Diego in sheet metal but left the company three years later to design racing planes. Among those he worked on was the "Schoenfeldt Firecracker" that won the National Air Race in 1938 and 1939.

McClure was rehired in 1940 as an inspector, became a general supervisor in 1944 and the same year transferred to Fort Worth as chief inspector. He has been active in the American Society for Quality Control for a number of years, was elected a fellow in 1959 and national president in 1960. He has served as chairman of the Aerospace Industries Association quality control committee.

Retirement Planning Meetings Will Resume During September

Retirement planning meetings will begin again next month for General Dynamics/Convair men and women who will reach retirement age in three years.

First fall session will be Monday (Sept. 11) at 7:30 p.m. in GD/Convair cafeteria executive dining room on Pacific Hwy.

The meetings will continue weekly on Monday nights until next summer, said Keith Sears of GD/Convair employee services who is in charge of the retirement program. Financial planning for retirement will be the subject of the next six sessions.

Importance of revised budgets to keep within reduced incomes will be stressed by Sears. A film dealing with finances will be shown and discussed.

All of the nearly 200 GD/Convair men and women already in the preparation program will be notified individually, Sears said. However, others who will be retiring at earlier dates are welcome to attend any of the discussion groups if they call ext. 1705, Plant 1, in advance.

Eight meetings were held earlier this year in the company's first program of this kind. They had been recessed during the summer vacation period.

'Labor Day' Dinner Set For Thursday

A holiday dinner will be served at both GD/Astronautics and GD/Convair cafeterias tomorrow (Aug. 31) in observance of Labor Day.

The same menu will be offered at all plant cafeterias, GD/Convair Plants 1 and 2, and GD/Astro sites for $1, including tax, throughout all lunch periods.



GREETINGS—Civil Air Transport's Mandarin Jet, first Convair jet airliner to land at Tokyo, Japan, airport receives enthusiastic welcome on inaugural flight as crowds swarm around gold and white craft. In foreground are GD/Convair transport field service representatives (from left) Vic Korski, Court Zeiss, Harry Addis.

Log Book Entries

Service Emblems

CONVAIR

Service emblems due during the period Aug. 16 through Aug. 31.

Thirty-five-year: Dept. 188-2, R. F. Weidner.

Twenty-five-year: Dept. 25-1, R. A. Schultz; Dept. 117, Daniel Whorton; Dept. 160, C. F. Uhl; Dept. 288-2, B. A. Buffat.

Twenty-year: Dept. 6-02, A. R. Keller; Dept. 31, E. R. Burgess; Dept. 34-2, R. H. Feeley; Dept. 97-0, C. L. O'Rourke; Dept. 100-5, R. B. Miller; Dept. 101, Kenneth Phillips.

Dept. 129, C. M. Craig; Dept. 146, R. K. Bloodgood, J. A. Carrieres; Dept. 148, A. J. McDonough; Dept. 179, G. M. Zelno; Dept. 180, L. W. Barbour; Dept. 188, G. J. McMillan, H. H. Rush; Dept. 197-1, H. R. Franson; Dept. 288-8, L. L. Wall; Dept. 292-9, P. U. Templeman; Dept. 401, G. V. Gourdin, C. N. James, J. B. Johnson, W. R. Orvick.

Fifteen-year: Dept. 1-11, S. Y. Johnson; Dept. 1-23, Mildred G. Herman; Dept. 3, E. A. Gaskins, C. G. Oatman, K. A. Sears; Dept. 6-02, F. J. Banks; Dept. 15-6, G. P. Williams; Dept. 16-6, Edna V. Wayman; Dept. 21-1, F. A. Chavez; Dept. 100-0, Evelyn G. Gilger; Dept. 115, W. H. Hand, E. B. Ruttan; Dept. 146, C. W. Brink; Dept. 171, A. D. Handley; Dept. 292-1, C. H. Knaffla; Dept. 401-5, G. E. Hope.

Ten-year: Dept. 1-18-1, E. J. LeFevre; Dept. 6, J. A. Bard, J. R. Hilliard, G. C. Hom, B. D. Just, R. P. Poston, Helen A. Reno; Dept. 15-4, R. J. MacDougall, C. A. Zeiss; Dept. 25, R. B. Kuhn, P. F. Taesler, C. A. Yale.

Dept. 34-2, Wade Bryn; Dept. 44, Christine C. Hayward, Margaret W. Keogh; Dept. 68-0, D. H. Love; Dept. 91, Mary E. Cockrill, Edith M. Webster; Dept. 102, Andrew Dobrywoda; Dept. 123, J. L. Williams; Dept. 140, Vivian T. Rezabek; Dept. 146, Frances S. Shepherd.

Dept. 160, Manuel Dominguez, Lea Parrett Jr.; Dept. 171, J. J. Giordino; Dept. 188-4, J. E. Balale; Dept. 190-2, H. A. Buehler, J. D. Stillman; Dept. 192-5, Gilda L. Dell'Acqua; Dept. 201, H. E. Bledsoe; Dept. 205, H. H. Kawamoto; Dept. 288-2, P. R. Winther.

Dept. 400, Eleanor L. Edington, M. T. La Reau, Robert Stratton, Leonard Zang; Dept. 401, Hugh Audas, E. W. Dery, Louise C. Renfro, N. C. Rudolph, H. W. Shaffer.

GD/ELECTRONICS

Twenty-year: Dept. 7, L. H. Jacobson, T. A. Markel.

Fifteen-year: Dept. 2, F. L. Farrell; Dept. 5, H. G. Fisher.

Ten-year: Dept. 3, Charles Zak; Dept. 5, D. M. Dreyer, E. D. Judd; Dept. 6, E. G. Frost.

Promotions

CONVAIR

Promotions to or within supervision effective Aug. 14.

Dept. 2-0, President's Office: To acting division counsel-GD/CV, M. P. Lovett.

Dept. 16, Communication: To chief of graphic reproduction, H. B. Day. To chief of photography, D. Otto.

Dept. 97, Data Processing: To data processing general supervisor, J. J. Kelly. To data processing supervisor, T. Yano.

GD/ELECTRONICS

Dept. 7, Material: To M/C supervisor, J. R. Graves Jr. To M/C asst. supervisor, W. R. Schultz.

Dept. 8, Production Engineering: To tooling asst. supervisor, G. L. Hale.

Births

CONVAIR

APERLO—Daughter, Diana, 7 lbs., 12 oz., born Aug. 17 to Mr. and Mrs. Peter Aperlo, Dept. 6-03.

CHUBB—Daughter, Drusilla E., 8 lbs., 13 oz., born April 4, to Mr. and Mrs. Quillen Chubb, Dept. 192-3.

GONZALEZ — Daughter, Patricia Yvonne, 6 lbs., 14 oz., born Aug. 5 to Mr. and Mrs. Gilbert Gonzalez, Dept. 16.

MARTIN—Son, Jeffrey Brent, 8 lbs., 8 oz., born Aug. 20 to Mr. and Mrs. Charles Martin, Dept. 16-6.

PEREZ—Son, Armando Jr., 8 lbs., 2 oz., born Aug. 17 to Mr. and Mrs. Armando Perez, Dept. 192.

RIVAS—Son, Edward, 9 lbs., 8 oz., born Aug. 9 to Mr. and Mrs. Stephen Rivas, Dept. 160.

TORRES—Daughter, Yvonne, 4 lbs., 2 oz., born July 26 to Mr. and Mrs. Juan Torres, Dept. 141.

WILLIAMS—Son, Jeffrey Van, 7 lbs., 6½ oz., born Aug. 21 to Mr. and Mrs. James Williams, Dept. 102.

WONG—Daughter, Tamara Jean, 7 lbs., 11½ oz., born July 6 to Mr. and Mrs. Ben G. Wong, Dept. 6.

Deaths

CONVAIR

BEZNICA—John L., Dept. 97-6. Died Aug. 11. Survived by daughter, Ellen Beznica, and mother.

CHAPIN—Bronce, Dept. 48-9. Died Aug. 21. Survived by wife, Louise; three sons, three daughters; mother, four brothers, and one sister.

KLIPPERT—Robert G., Dept. 148. Died Aug. 10. Survived by parents, Mr. and Mrs. Jake Klippert, and brother, Stanley N. Kohler, Dept. 137.

HOLLOMAN AFB

ERICKSON—William W., Dept. 313. Died Aug. 19. Survived by wife, Carmen; two sons, one daughter; mother, Mrs. Myra Erickson; sister, Doris Taylor, Dept. 1-51; brother, Robert Erickson, Dept. 313.

Personals

We deeply appreciate the kind expressions of sympathy by Convair friends at the loss of our husband and father, James P. Frick.

Mrs. James Frick and family.

* * *

We wish to thank all of our friends at Convair, and especially those in Dept. 14-4 at Rose Canyon, for the many kindnesses and sympathy shown at the loss of our father, A. H. Kipple.

Dale and Margaret Kipple (Dept. 14-4), and family.

* * *

Our sincere thanks to Convair friends, particularly those in Dept. 148, for the beautiful flowers and expressions of sympathy at the loss of our son and brother, Jerry Klippert.

Mr. and Mrs. Jake Klippert, Stanley N. Kohler, Dept. 137.

* * *

The generosity and expressions of sympathy displayed by Convair friends, particularly my fellow employees in the Thermodynamic Lab, in the recent loss of my wife is acknowledged with heartfelt gratitude.

Frank Rezek, Dept. 6.

* * *

My deepest thanks to Convair personnel for the kindness and consideration shown us in the loss of James Marvel. It is comforting to know that people care and are so kind and sympathetic.

Mrs. James Marvel.

Retirements

CONVAIR

HALSEY—Clarence S., Dept. 180. Seniority date March 13, 1947, retirement effective Aug. 11, 1961.

HENSON—Lester V., Dept. 25. Seniority date Nov. 6, 1950, retirement effective Aug. 7, 1961.

MACKAY—Ernest L., Dept. 15-3. Seniority date Nov. 2, 1951, retirement effective Aug. 4, 1961.

NELSON—Albert L., Dept. 25-9. Seniority date Oct. 1, 1951, retirement effective June 1, 1961.

S-C Consoles To Be Shown

A special display of Stromberg-Carlson stereophonic high fidelity consoles will be set up for GD/Convair and GD/Electronics people in the San Diego plant on Sept. 14.

Models of the new "Young America" series may be seen that day from 3:30 to 5:30 p.m. in the Plant 1 cafeteria, announced Ken Wulfemeyer of GD/Convair employee services.

Representatives from Thearle Music Co. will be on hand to demonstrate the stereo models and answer questions.

General Dynamics people may purchase any of the Stromberg-Carlson consoles or components under an employee purchase program. They receive discounts by presenting a purchase certificate to an authorized dealer at the time of purchase. These certificates are available from employee services office, Plant 1.

ASTRONOMY EVENT SET FOR SEPT. 16

Amateur astronomers at GD/Convair are invited to participate in the first public star party and astronomy exhibit scheduled at San Diego State College, announced Keith Sears, CRA commissioner.

Date for the astronomy event is Sept. 16 from 7 p.m. until midnight. It is being sponsored by the State College and Pacific Amateur Astronomers with Convair Astronomy Club members invited to join in the evening of star-gazing.

Anyone with a telescope which could be set up at the college and who would be willing to act as host, as well as Convair astronomers who could help to arrange exhibits of telescope making, celestial photography, optics, are asked to contact Sears, ext. 1705, Plant 1.

★ Convairiety ★

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Fort Worth Editorial Offices, Col. 72, Admin. Bldg., GD/Fort Worth, Mail Zone 0-50, P.O. Box 748, Fort Worth 1, Texas. Telephone PErshing 8-7311, ext. 2961. Staff: Dave Lewis, news editor; Louise Sutton, Mary Beck.

Pomona Editorial Offices, Room 106-D, Bldg. 1, GD/Pomona, Mail Zone 3-3, P.O. Box 1011, Pomona, Calif. Telephone NAtional 9-5111, ext. 6226/5279. Staff: James Combs Jr., news editor; Carol Colbert. Daingerfield news office, P.O. Box 947, Daingerfield, Texas. Telephone Lone Star, Texas, 2211, ext. 424.



"MOON MEN"—Pilots of 332nd FIS at Thule, Greenland, line up beside Convair F-102 garbed in new "moon suits," survival pressure outfits designed for extreme altitudes, low temperatures. During dress rehearsals pilots swam in 34-degree waters, pushing icebergs out of way. Lt. Col. H. E. Fisk commands squadron. Ed Gross, current GD/Convair field service rep, recently replaced Don Thompson.

Swissair Jets Slated to Fly Zurich-Tokyo

(Continued from Page 1)

Federal Aviation Agency accepted its 880-M on Aug. 14. The craft is still at San Diego in a several-week pilot training and auto-pilot checkout period. Delivery flight to Oklahoma City base is slated for mid-September.

A second 880-M was scheduled for delivery to Japan Air Lines this month, with the third to follow soon. At least one of JAL's three 880-Ms was due to make the transpacific hop homeward-bound shortly.

First JAL plane "Sakura," delivered in mid-July, is still at GD/Convair for pilot training.

Convair 880-Ms are now in service with Civil Air Transport, Alaska Airlines, and Viasa of Venezuela.

CAT's "Mandarin Jet" made its inaugural flights to cities on its Far Eastern network during the middle of July. It is serving Taipei, Tainan, Hong Kong, Bangkok, Okinawa, Tokyo, and Seoul. GD/Convair field service reps at Formosan bases in support of the 880-M report that it was being integrated into passenger service with little difficulty, in fact, flew an entire week without mechanical delay of any kind.

Alaska Airlines 880-M, which left for Seattle, Wash., the last day of July, has been on route proving runs this month in preparation for scheduled service between Seattle, Fairbanks and Anchorage.

The Viasa 880-M left San Diego on Aug. 2 for New York and continued from there three days later for Caracas, Venezuela, preparatory to start of commercial service between Caracas and New York, Miami, New Orleans, Bogota, and Lima.

Fall Fashion Show Planning Under Way

"Winter Wonderland," will be the theme song of the fall fashion show sponsored by GD/Convair CRA in cooperation with other members of the San Diego Industrial Recreation Council.

Men and women, both, will be invited to see the latest in fall and winter styles, said Martha Woodberry, CRA commissioner of women's activities.

It will be held Oct. 18 in the Walker-Scott Co.'s College Grove Center with fashions by Walker-Scott.

Advance ticket sale at $1.25 each will start tomorrow (Aug. 31) at GD/Convair employee services outlets.

ROCKHOUND SHACK TO OPEN SEPT. 12

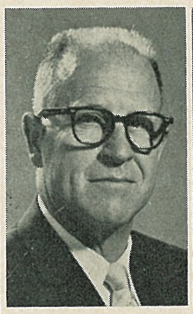
Classes at the Rockhound Shack on Pacific Hwy. will reopen next month after a two-month summer vacation, said Dan Whorton, CRA Rockhound Club commissioner.

Regular instruction schedule will start Sept. 12, from 7-9 p.m., and continue each Tuesday and Wednesday evening. Classes for second-shift employees will be Tuesdays from 12:30 to 2:30 p.m.

Loomis Assigned Airline Role; Famme Now General Manager

(Continued from Page 1)

S. Chambers as manager of contracts for GD/Convair (succeeding George S. Buchner, who has left the company) and assigned to H. C. (Barney) Chambers responsibility for division sales matters.



R. A. Neale



B. J. Simons



H. C. Chambers



F. S. Chambers

All involved in the organizational realignment are well known within the San Diego organization, with the exception of Neale, who has been on the staff of E. J. Williams, GD senior vice president-manufacturing, in San Diego since July. A veteran aircraft executive, Neale was born in Seattle, Wash., and spent nearly 17 years with Boeing in plants at Seattle and Vancouver, B. C. He joined Canadair at Montreal as assistant general manager in 1947 and from 1950 to 1957 was vice president for manufacturing. Under his direction Canadair produced a wide range of aircraft, including five configurations of transports, both military and commercial. Among the planes manufactured were Lockheed T-33 trainers and more than 2,000 North American F-86s. Neale headed manufacturing during the CL-28 Argus (long range anti-submarine plane) program and started development of the CL-44 swing-tail cargo ship.

Between 1958 and 1960 Neale was Canadair representative on the Pacific Coast, chiefly concerned with transfer of BOMARC subcontracts. More recently he represented Canadian Aviation Electronics of Montreal.

Simons is a native of Lima, Ohio, with company service dating from 1935 when he joined Stinson Aircraft, Wayne, Mich. He was flight test engineer there, chief project and later division chief engineer. He transferred to San Diego in 1948, serving as assistant project engineer and project engineer, working on T-29, C-131, 340 and 440 aircraft. A member of S.A.E. and of NASA's advisory committee on aircraft operating problems, Simons has been senior project engineer on the jet transport program, intimately associated with development of the 880 and 990.

A Minneapolis native, Bergstrom attended University of Minnesota where he studied aeronautical engineering. He served Continental Machines, Inc., in Minneapolis as a mechanical engineer and joined Convair in 1940. From a group engineer in 1942 he progressed through various key posts and was project engineer in 1960 when named project manager of the logistics transport program.



J. S. Bergstrom

Frank S. Chambers, now GD/Convair manager of contracts, is a Los Angeles native and attended University of Hawaii. He spent five years as a traffic representative with Pan American Airways in Honolulu and later was staff adviser to the RFC on Guam. He joined the company in 1951 as a contract analyst and in 1955 became chief of contract administration. Last year (**Convairiety**, Jan. 20, 1960) he was appointed chief of contract administration-commercial.

H. C. (Barney) Chambers, who assumes GD/Convair sales responsibilities, is a Little Rock, Ark., native and joined Convair in 1939. He was a material control general supervisor when he transferred to Pomona Division in 1953 and served as chief of manufacturing control and customer requirements administrator before returning to San Diego (**Convairiety**, Nov. 23, 1960) to become program director, transfer tasks.

(For biographical data on Famme and Peterson, see **Convairiety**, June 21, 1961).

Five Charity Groups Get Con-Trib Gifts

Five organizations in the San Diego and Los Angeles areas were voted $3,400 from General Dynamics/Convair Employees' Con-Trib-Club in recent weeks.

July contributions included $200 to the Los Angeles County Epilepsy Association and $400 to the American Cancer Society, Los Angeles Branch. Final approval was given this month for $200 to the Salvation Army at Palmdale on recommendation of the Antelope Valley Advisory Committee.

Sharp Memorial Hospital will get $600 to be used for completion of the artificial heart-lung machine. Family Service Association was voted $1,000 for counseling services and the Homemaker Service of the association received the same amount.

TOOL SERVICE COUPLE WED

Louise B. McCray and Morris A. Gladden, both in Dept. 401, tool service, at GD/Convair, were married Aug. 5 at Ramona's Marriage Place in San Diego Old Town.

Is It News? Call Convairiety

Business Systems Management Course Listed by Cal-Western

People now working in systems and procedures and computer programing at General Dynamics/Convair are eligible to enroll in a new cooperative California Western University and GD/Convair program.

Offered for the first time this year is a certificate program in Business Systems Management.

To qualify for the certificate, students must complete 42 semester units of college level instruction. Twenty-four hours will be required courses and 18 in electives. Classes will be held at Cal-Western, San Diego City College and within GD/Convair.

Coordinated by GD/Convair educational services, information on the course is now available by contacting any of the offices, at exts. 2166, 1548, or 491.

People approved by educational services for the program will register Sept. 14 and 15 as regular students in the Cal-Western Evening Division. Registration will be from 5:30-8:30 p.m. both days at International Relations Bldg., Point Loma.

Admit slips from GD/Convair educational services are required.

* * *

Enrollment will be made the same days (Sept. 14-15) and times for the usual management development courses offered at Cal-Western in cooperation with GD/Convair and GD/Astro.

Tuition is prepaid by the General Dynamics divisions for supervisors and non-represented flat-salaried people approved for the program.

Naval Reservists Attend Seminar

Three General Dynamics naval reservists attended the 8th annual Nuclear Sciences Seminar at Idaho Falls, Idaho, Atomic Energy National Reactor Test Station July 23 through Aug. 5.

Attending from GD/Convair were Cdr. Raymond D. Tuttle, USNR-R, material project coordinator for procurement planning, and Cdr. Lewis I. Estep, USNR-R, senior research engineer, operations analysis, as well as Cdr. Charles Wagner, USNR-R, General Atomic Division research and development staff.

These officers are members of the U. S. Naval Research Company 11-5.



B-36S ON COAST—Although B-36 usually is associated with Fort Worth—and rightly so—San Diego also played role. Components parts were manufactured on coast beginning in 1949 and following year B-36s became familiar sight at San Diego as ships arrived for conversion to B-36D (including addition of jet engines).



FRIENDS FROM AFAR—Young people from Switzerland, Denmark, Italy see Swissair Convair jet transport during recent GD/Convair Plant 1 tour. In San Diego under "International Living" program were Doris Diethelm, Josef Klausler, Erica and Lotti Honold, Christoph Heller, Heidi Keller, Madeleine Schwander, Liselotte Schmid, Maja Wildhaber, Silvia Kaufmann, Liselotte Berger, Anne Bjorlow, Ugo Forzkieri.

Young Visitors Tour Factory During Taste of 'Life in America'

An "Experiment in International Living" came to General Dynamics/Convair one day this month with a visit from young Europeans in San Diego for a few weeks.

Eleven Swiss young men and women, a girl from Denmark, and a young Italian studying here under the American Field Service, visited the GD/Convair plant Aug. 17. They were briefed by R. L. Runnalls (Dept. 6), whose family is among those hosting the visitors.

While at GD/Convair they got a close-up of the Swissair Convair jet transport on the flight line and had lunch at the plant cafeteria. Assisting Runnalls in directing the tour were W. W. Lynt of military contracts and H. P. Schulthess, customer representative for Swissair-SAS, and David Thompson, chairman of the San Diego Council of the program.

With the exception of Ugo Forzkieri from Italy, they are all young professional people taking advantage of the "Experiment in International Living" to see firsthand the American way of life. Their time is divided into three phases—college, community and city. Before coming to San Diego they spent two weeks on the campus of Utah State University, Ogden, Utah.

First such group to be sponsored in San Diego, they are each being entertained by a local family and taking part in home activities and sightseeing.

Anne Bjorlow of Copenhagen, guest of the Runnalls family, hopes she can stay in this country and get employment as commercial photographer.

GD/Convair was the only industrial plant visited, but the Navy also entertained them last week.



POMONA PHYSICIST WILL READ PAPER

Dr. Marvin C. Abrams, senior physicist at General Dynamics/Pomona, will deliver a paper at the Western States section of the Combustion Institute Sept. 7-8 at the University of California at Berkeley. Title of the paper will be "Chemical flame quenching theory."

Steady Growth

Speed and Ceiling Greatly Increased During Development of B-36 Models

(Following is installment No. 66 in continuing history of Convair aircraft. It sketches years of B-36 development.)

Despite the political storm that raged around the airplane, the Air Force continued building its potential for "massive retaliation" until it had a fleet of more than 350 B-36s. The last was delivered from General Dynamics/Fort Worth (then Convair FW) on Aug. 14, 1954. By then only the basic airframe resembled the prototype. Since 1946 the bomber had added more than 100,000 pounds in gross weight, more than 100 mph in speed and more than 10,000 feet in service ceiling.

The B-36B of 1948 introduced the first major power improvement, a new R-4360 engine with water injection. This added 500 hp to the rating of each unit. On Jan. 29, 1949, a B-36 set what probably will remain an all-time record for bomb lift by taking a pair of dummy 42,000-pound Grand Slam bombs aloft at Muroc (now Edwards AFB) in California. The first was dropped from 35,000 feet and the second from 40,000.

During the 1949 hearings, testing was under way on the 10-engine B-36D. Four auxiliary jets were paired in pods slung beneath the outer wing panels. This boosted top speed to "over 435 mph" and the prototype climbed to 47,000 feet. Service ceiling was rated officially at "over 45,000." In 1950 the new B-36F introduced the dash-53 line of R-4360 engines, rated at 3,800 hp each.

Over the years there was a continuous program of modification in the bomber's instrumentation, armament system and fuel tankage. By the time the final model B-36J flew in 1953 the gross takeoff weight had grown to more than 400,000 pounds (contrasted to 278,000 in the original XB-36). Modernization programs brought the earlier models up to standard, and there were two important modifications—the RB-36 strategic reconnaissance version, and the "Ficon" GRBs, equipped to carry a jet fighter to a distant launching point, launch and retrieve it in mid-air.

Unique among all B-36 variants was the NB-36H, flying test bed for an airborne nuclear reactor. This modification was built and flown at Fort Worth after the Air Force awarded a contract in 1951 for development of the first atomic-powered airframe. (Development of the power plant was assigned to General Electric.) The NB-36H flew on conventional power, carrying the small Convair-built test reactor far aft in the fuselage.

At the time of the 1949 Congressional hearings the Air Force predicted a useful life of at least five years for the B-36. Toward the end of this period (beginning in 1953) a research program was launched to lighten and streamline the bomber, that it might push its service ceiling over 50,000 feet, the optimum altitude of contemporary jet fighters. According to an unofficial but authorized account, Operation Featherweight succeeded in reducing the plane's gross weight some 100,000 pounds. One of the solutions was to jettison all defensive armament except the radar-controlled tail cannon.

"Since the B-36 can fly level above 50,000 feet it is virtually immune to attack from above," the authors of the account reported. "In the thin air 10 miles up, the B-36 with its giant wingspread can actually outmaneuver the stubby-winged, heavily loaded fighter." Electronic countermeasures were said to constitute the bomber's defense against guided missiles.

During the Symington Subcommittee hearings on air power in 1956, Gen. Twining confirmed that special stripped B-36s were flying above 50,000 feet and "can go higher than the Bear" (the Russian intercontinental bomber). At that time the B-36 was scheduled for phase-out as jet Boeing B-52s replaced it. Of SAC's 11 heavy wings, however, 10 still were B-36 outfits stationed in the U. S., North Africa and Guam.

Thus, 15 years after design started, the last and greatest of the piston-engined bombers—"designed in the maturity of one air age, flying in the infancy of another"—was still strongly in business.

Design Specialist Will Address IRE

A General Dynamics/Fort Worth aerosystems design specialist will address the Fort Worth Section, Institute of Radio Engineers, at 7:30 p.m., Sept. 12 in Botanic Garden Center.

He is Doyle Collup, Dept. 6, who will speak on "Audio Distortion Contributed by the Broadcast Directional Antenna." The meeting will be open to the public.

Dan Egan, Dept. 6, is vice chairman of the Fort Worth Section.

880-M Jet Featured On Formosan Stamp

Civil Air Transport's Convair 880-M has been featured on the latest Formosan airmail stamp.

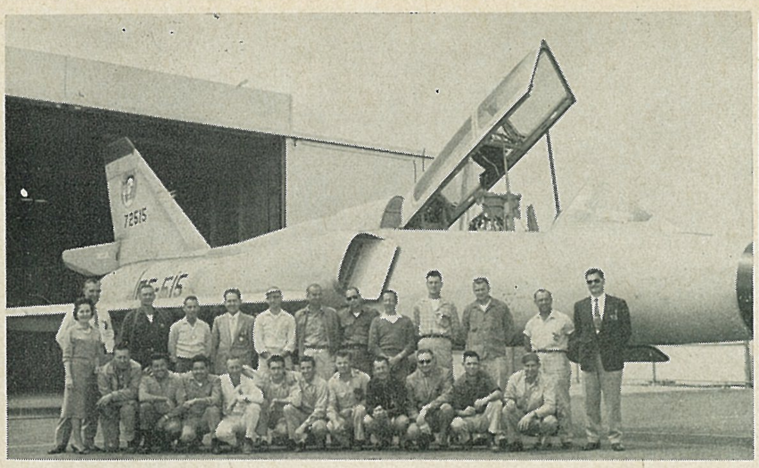
The gold and white Mandarin Jet is faithfully reproduced, even to dragon emblems, flying across a bright blue sky. It is superimposed on the red flag of Nationalist China. In the lower right-hand corner is a tiny post-war biplane showing progress in air carriers from 1921 to 1961.

LUMNITZER NOW LT. COLONEL USAR

S. W. Lumnitzer of GD/Convair still photo lab was promoted recently to lieutenant colonel in the U.S. Army Reserves. He is attached to the 6215th Army Garrison at Fort Rosecrans.



"It's been moved and seconded . . . We're going out for dinner."



PHASING OUT — GD/Convair's F-106 field operations unit poses with last interceptor readied for ferry flight to Palmdale. All were in Dept. 271 unless otherwise indicated. Standing (from left): Kitty Law, E. F. Custenborder, W. R. Sonnenberg (Dept. 197), L. A. Brugger (Dept. 6), Jim Airy (Air Force), G. Beck, W. G. Schaubel, R. R. Mathews, R. Gattshall (Dept. 400-4), W. J. Becker (Dept. 288), J. B. Eaton, L. E. Rulik (Dept. 288), F. G. Werner. Crouching (from left) are R. Apostle (Dept. 270), F. A. Lucio, E. E. Pizano, D. W. Condee, E. A. Baxter, J. McCormick, R. J. Sunder, L. A. Quick, R. L. Sumpter (Dept. 292), O. D. Andrade, J. M. Tuggle.

GD/Convair at AF Plant 42 Near Palmdale Shuts Down

General Dynamics/Convair people will be saying farewell to the company's facility at Palmdale (known as Air Force Plant 42) this week following delivery of the final F-106.

Operated the last seven years as a field operations and flight test site during the Convair jet interceptor era, Palmdale facility saw a long parade of F-102s and F-106s pass through for AF acceptance.

First F-102 landed at the desert community in July, 1954. Since then, F-102As, TF-102As, follow-on F-106As, and F-106Bs were processed for final acceptance. These were in addition to the last AF contract for processing test-to-tact F-106s. All of the jet interceptors were built at GD/Convair Plant 2 in San Diego before being flown to the Palmdale site.

From 75 in early 1955, facility population expanded to a peak of over 2,500 in late 1957 at the height of the F-102 program.

Directing operations at the off-site facility during most of its existence was W. J. Martin. Except for a year, during part of 1959 and '60, when he served at San Diego as special assistant to the division manager on the F-102/F-106 program, he had been operations manager since fall of 1955. W. H. Rumbaugh, now superintendent of field operations at GD/Convair, replaced him during that period. F. J. Parker, long-time chief of operations services at Palmdale, has been acting manager since this June when Martin returned to GD/Convair division as manager of quality control.

Last Convair F-106 to go through Palmdale operations was No 453, bailed to GD/Convair by the AF for continuation of a special flight test program at both Palmdale and Holloman AFB, N. M. It was turned over to the Air Force on Aug. 3.

* * *

Laudatory comments were received from Air Force officials this month recognizing GD/Convair's part in the flying safety record at AF Plant 42 (Palmdale facility).

Plant 42 received the Air Materiel Command Unit Achievement Flying Safety Award for performance during the last six months of 1960.

"In addition to the pilots involved, I would like to express my appreciation to all the supporting personnel on the ground. As always, their diligent efforts are the backbone of a successful Flying Safety Program," wrote Lt. Col. C. W. Atterholt, USAF, chief of San Diego Air Procurement District.

Announcement of the award was made by Gen. S. E. Anderson, Air Materiel Command commander, and Col. G. F. Keeling, commander Hdqrs. Western Contract Management Region.

Sports Car Drivers Win Top Places in Annual 'Countdown'

Sports car drivers from GD/Convair and GD/Astro pushed their cars over a 300-mile course to take top places in the annual Rohr Countdown Rally, Aug. 13.

Tommy Jackson and Pete Aperlo of Convair Sports Car Club crossed the finish line in their Alfa Romeo to place second. Their 2.41-min. error time, computed on the times marked up at the 10 check points along the route, was only slightly higher than the first-place 2.17 minutes.

Bill Rector and George Blondin of Astro, driving a Porsche, drove the back country course to sweep the field of 140 entries.

At least 20 Convair and Astro sport cars competed in the rally which led drivers from Chula Vista through Warner Hot Springs to the finish at Sorrento Valley. It took about 7 hours to cover the entire route, with time out for lunch and rest stops.

Plant 1 Cafeteria Has New Manager

Robert Worrell, Prophet Co. manager of the GD/Convair Palmdale facility cafeteria for several years, has assumed responsibility for Cafeteria No. 3 in Plant 1. He had been at the Astronautics cafeteria the last few months after the Palmdale cafeteria was closed.

W. E. Rickman, supervisor of General Dynamics cafeteria operations for the Prophet Co., said that Worrell replaces Charles Smiley who has transferred to Ogden, Utah, as manager of the new Weber College cafeteria.

Worrell reports directly to C. C. Jacobs, manager of both Plant 1 cafeterias.

Salvage Yards Closed On Holiday Weekend

Salvage yards at GD/Convair and GD/Astro both will be closed this Saturday (Sept. 2) because of the holiday weekend.

Schedule for the following four weeks will be:

GD/Astro—Sept. 9 and 23.
GD/Convair—Sept. 16 and 30.

Winter Keg Leagues Get Set For Action

Convair keglers will start bowling balls rolling down the lanes in a new season's competition as winter play swings into action next week.

Leagues are shaping up now for University Lanes and Mission Valley Bowlero on Tuesday evenings; Pacific Recreation and Frontier Lanes on Wednesdays; Victory Lanes and Frontier Lanes on Thursdays; Clairemont and Tower Bowls on Fridays.

Clairemont and Bowlero leagues will open play Monday (Sept. 11).

For detailed information on Convair leagues, bowlers may call Jim Hayman, CRA commissioner, at ext. 1155, Plant 1.

Education Data Made Available

General Dynamics/Convair personnel intending to further their education may obtain brochures and information on courses offered by San Diego area schools at all educational services offices.

Bulletins for fall semester of University of California Extension, San Diego City College, and San Diego State College are available at all Plant 1 offices in Bldgs. 15, 16, and 51. Notices have been placed on bulletin boards at Rose Canyon.

U. of California Extension classes begin the week of Sept. 18 with enrollment to be made at first class meetings. Students who have already applied for admission to the Extended Day Program at State College may get class schedules at the GD/Convair educational services offices. Extension classes of State College held off campus are still open for registration, with bulletins and schedules on hand.

In-Plant Class Series Slated

In-plant supplementary classes will begin the week of Sept. 11 for General Dynamics/Convair personnel.

Classes will be given in Blueprint Reading, basic and advanced; Shop Math; Slide Rule; Effective Writing; Technical Writing, basic and advanced; Electricity; and Electronics.

All are co-sponsored by San Diego City College. They will be held in classrooms in Bldg. 14 and Bldg. 38 (at the north end of the CRA Clubhouse on Pacific Hwy.). Time will be set immediately after work for first-shift students and before work for second-shifters.

Times and locations will be announced in notices on bulletin boards throughout the plant. Detailed information may be obtained from Lee Woll, coordinator, educational services office, Bldg. 15, ext. 491, Plant 1.

BOWMEN PREPARE FOR TROPHY SHOOT SEPT. 10 AT BALBOA

Bowmen at Convair will compete in their semi-annual trophy shoot Sunday (Sept. 10), said Al Phipps, CRA commissioner.

Trophies will be awarded to top marksmen shooting at the 28 animal targets. Registration at the Balboa Park Field Range will be from 8:30 to 9:15 a.m. with shooting starting at 9:30.

Unless shooters present N.F.-A.A. cards with at least two field rounds within the last three months, they will be placed in top class, said Phipps. Contestants will be divided into 13 classes, both barebow and free style, depending upon their two-round average. One trophy will be given in the junior division, under 12 years of age.

All registered archers will be eligible for a drawing on a canned ham.

Other shoots in the offing are a turkey event in November and a surprise shoot in January. "All of the Convair Archery Club shoots are fun," Phipps said. "They are set up for the beginner as well as the expert so everyone has a chance to win. Children learning the sport are carefully supervised."

Swing-Shift Keglers Organizing Leagues

Swing-shift bowlers will meet next week at Pacific Recreation to organize two Convair handicap trio leagues, said Mike Brooks, CRA commissioner.

Two meetings are scheduled. One will be next Tuesday (Sept. 5) at 11 a.m. and the second, Friday (Sept. 8), at 1:30 a.m.

Any second-shifter at Convair wishing information on the Twilight Leagues may call Brooks after 9 a.m. at HO-9-8793.

1,000 See Dahlia Blooms Of Convair Gardeners

Over 1,000 flower lovers packed the Floral Association Bldg. in Balboa Park to admire the blooms displayed by Convair Garden Club at its annual Summer Show Aug. 13.

"Although we had fewer entries than usual, the dahlias shown were among some of the best specimens we've had," said E. L. Zimmerman, CRA commissioner.

Twenty-five Convair people entered 129 dahlias in 37 classifications; 15 brought 18 arrangements; 10 members submitted 24 vegetable entries; and three children exhibited.

C. H. Splinter of Astro Dept. 451-0 swept the field to take best of show for top dahlia bloom. Other best of show ribbons went to Arnold Carroll (Dept. 400), largest dahlia; Robert Schahn (Dept. 48), smallest dahlia; LeVonne Splinter (Dept. 1-61), arrangement; H. S. Boyd (Dept. 31), citrus fruit (avocados); J. E. Henderson (Astro Dept. 602), deciduous fruit (peaches); Jean Henderson (Dept. 16), corsage; Evelyn Finley (Dept. 14), vegetable (tomatoes); and Dennis Zimmerman, best child's entry.

Judging dahlias were members of the San Diego County Dahlia Society, R. Middleton, C. E. Sisk, and Henderson. Judges of arrangements, fruits, and vegetables were Mrs. Jean Kenneally, Mrs. R. S. Hoyt, Mrs. Middleton, floral culture experts of the San Diego County Rose Society.

According to Zimmerman there will be no scheduled events for the Convair group until its first fall meeting Oct. 11 when Organo representatives from the San Diego Fertilizer Co. will speak.

Following is a complete list of winners at the Aug. 13 show:

Single Bloom—Red, LeVonne Splinter; yellow, C. H. Splinter; pink, Grace Zimmerman; white, LeVonne Splinter; orange-buff, E. L. Zimmerman; blends, Evelyn Finley; bi-color, C. H. Splinter.

Semi and Full Cacti Bloom—Red, C. H. Splinter; yellow, Mr. and Mrs. Arnold Carroll; pink, C. H. Splinter; lavender, E. L. Zimmerman; white, E. L. Zimmerman; orange-buff, R. L. Schahn; blends, J. E. Henderson; bi-color, LeVonne Splinter; varigated, Mrs. H. S. Boyd.

Pompon, Three Blooms—Red, Mrs. Arnold Carroll; yellow, LeVonne Splinter; pink, C. H. Splinter; white, R. L. Schahn; lavender, C. H. Splinter; blends, LeVonne Splinter.

Miniatures and Balls, Three Blooms—Red, C. H. Splinter; white, Evelyn Finley; blends, C. H. Splinter; orange-buff, Mr. and Mrs. Arnold Carroll.

Singles—Evelyn Finley.

Citrus Fruits—Oranges, lemons, avocados, H. S. Boyd.

Deciduous Fruits—Peaches, J. E. Henderson; grapes, Grace Zimmerman; figs, Michael Alianelli; plums, Nancy A[illegible]elli; apples, John Barton.

Vegetables—Beans, Michael Alianelli; carrots, Margaret Boyd; leaves—rhubarb, H. S. Boyd; cucumbers, Michael Alianelli; egg plant, Michael Alianelli; tomatoes, Evelyn Finley; peppers, Nancy Alianelli.

Arrangements—Miniature, Grace Zimmerman; small, Mr. and Mrs. Carroll; medium, LeVonne Splinter; large, E. L. Zimmerman.

Corsages—Orchid, Jean Henderson; other flowers, Ann Freedman.

Children—5 to 11 yr., Janice Zimmerman; 12 to 16 yr., Dennis Zimmerman.

Road Runners Plan Weekend

Road Runners at Convair will return to Hulburd's Grove for the third time this year for a long weekend campout under the trees over the Labor Day holiday.

Although they spent their last outing at the grove, Aug 18-20, they decided they enjoyed the shady site so much they might as well return for the coming weekend, Sept. 1-4. Hulburd's Grove is 40 miles east of San Diego on Hwy. 80, reached by turning left at Descanso Junction.

High point in the coming trip will be the old-fashioned fried chicken dinner set for Saturday night. Alma Hanson as chief cook will preside over the chicken frying. The club will provide her with two 18-inch cast iron frying pans which will be part of the permanent equipment.

Other items on the menu will be corn on the cob, potatoes, salad, pan gravy.

Wagonmaster in charge of arrangements for the coming trek is Lee Kunkel.

GD/CONVAIR GIRL WEDS

Marilyn Capps of General Dynamics/Convair employee services was married Aug. 19 in a Las Vegas, Nev., ceremony to Dave Bramsen, based in San Diego with the U. S. Navy.

Riding Club Slates Weekend Campout

Final plans for a weekend campout will be made by Convair Riding Club members at their Sept. 7 meeting, Gillespie Field Clubhouse, 8 p.m.

The trail ride and campout is set for Sept. 9 and 10 from Pine Valley stables.

Convair people interested in accompanying the club on the outing are urged to attend the meeting, said V. V. Thomason, club president. Horses may be rented at the public stables at Pine Valley.

Members have been invited to join in the All-Arabian Horse Show sponsored by Southern California Arabian Assoc. Oct. 6-7-8 at Del Mar Fairgrounds. A committee will be named at the Sept. 7 meeting to handle arrangements.

Williamson Wins Match

Joe Williamson (Dept. 401-5) retrieved top spot in CRA Pistol Club competition after a several-month absence from the winners' circle by taking both the .22-caliber police course and the short national match Aug. 13.

Williamson nosed out Jim Halfacre (Dept. 180) by one point to stand first in the master class of the police course with 291. Carl Hornburg (Dept. 139) took third with 288.

A tally of 258 was good enough for a first for Williamson in the national. Hornburg was second this time with 254; E. E. Bicka[illegible] (Dept. 215), third, 246; and Bi[illegible] Dittmann (Dept. 6), fourth, 241.

In other police course classes W. G. Walker (Dept. 6) was first in the expert with 288; Dittmann, second, 283.

In sharpshooter class Arley Utter (Dept. 128) was first with 265; Harvey Ingalls (Dept. 6) second, 250. Bill Mentlick, whose father is in Dept. 401, was top marksman with 239, and R. G. Lair (Dept. 401-2), second, 238.

'Bowery Ball' Set Sept. 30

Final arrangements for a September informal dance sponsored by General Dynamics/Convair Management Club are nearing completion.

Tickets to the "Bowery Ball," set for Sept. 30, will go on sale soon after the first of the month, said M. C. Tombler, dance chairman. Members, eligible nonmembers, and their guests may purchase the tickets at $2 per couple at usual outlets.

The ball, which takes the pl[illegible] of the usual monthly meetin[illegible] will be held at Balboa Club in Balboa Park. Francis Leonard and his orchestra has been signed for dancing from 9 p.m. to 1 a.m.

Arrangements are in the hands of a committee from engineering, sponsoring department.

Hemphill to Speak For Hams Aug. 31

T. M. Hemphill, GD/Convair engineer, will be guest speaker at tomorrow night's (Aug. 31) meeting of the Convair Radio Club.

Members and guests will gather at 8 p.m. at the club's headquarters on Harbor Drive for a short business meeting preceding the program, said J. T. Lack, CRA commissioner.

Hemphill, also an amateur radio fan with call letters W6PAN, will describe electronic tracking of satellites.

Few Openings for Charm School Remain for Convair Ladies

There is still room in the CRA-sponsored charm classes, starting next month, for a limited number of Convair women looking for a change of pace, said Martha Woodberry, commissioner of women's activities.

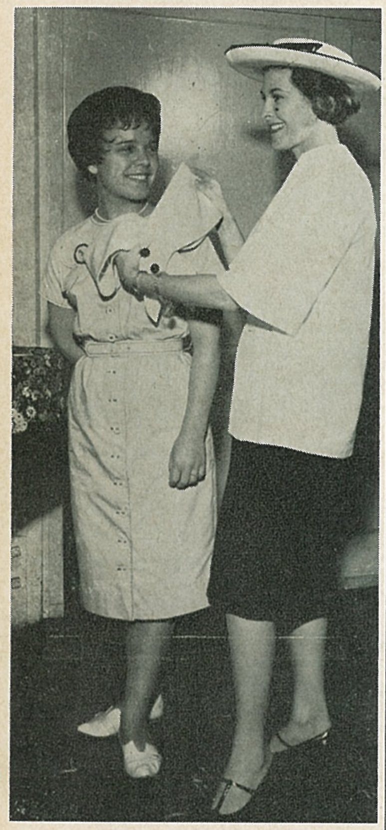
Convair ladies and teen-age daughters interested in a personal improvement program may still register at Convair employee services for the new beginning charm school. First of six weekly classes will be Sept. 20.

The complete course, covering a wide range of subjects, costs $9, a fraction of the regular price of such a course, said Mrs. Woodberry. CRA underwrites the major amount for Convair employees and members of their families. The entire fee must be paid at time of registration.

Mrs. Edith Antelline, well-known San Diego fashion commentator and charm school instructor, will be in charge. She will initiate the women in basic fundamentals of proper diet, posture, dress, and makeup.

As the classes are open to women from other companies under Industrial Recreation Council arrangements, all those at Convair wishing to join are urged to apply as soon as possible. Weekly sessions will be held Wednesday nights from 7 to 9 p.m. in the Convair cafeteria executive dining room.

Enrollment is being taken now at employee services, both Plants 1 and 2; and at Rose Canyon, in the office of Virginia Cannon, ext. 2125.



NEW LOOK—Marilyn Capps Bramsen (Dept. 3-2) is clued in on use of accessories to brighten fall costumes by Mrs. Edith Antelline (right), who will instruct upcoming charm school for GD/Convair women.

LABOR DAY SKIING SESSIONS PLANNED

A full schedule of skiing is in store for Convair Water Ski club members during the next couple of weeks.

A holiday breakfast and morning of free skiing will be held on Labor Day (Sept. 4) at Santa Clara Point in Mission Bay, said Gene Sevigny, CRA commissioner. Water skiers will gather at 6 a.m. and ski until 11 off the point.

Saturday skiing hours for the next two weekends (Sept. 2 and 9) will be from 6:30 to 11 a.m. at Santa Clara Point; from 11 a.m. to 1 p.m. off Tierra del Fuego.

On Sunday (Sept. 10) a skiing session from 9 a.m. to 1 p.m. will be held off Tierra del Fuego. Regular evening session will be Sept. 13 from 5:30 to 8 p.m. off Santa Clara Point.

Photo-Journalist Will Address Club

Ian McLean, photographer-journalist, will tell Convair Camera Club members how to make a living with a camera at their Sept. 11 meeting, Photo Arts Bldg., Balboa Park, 7:30 p.m.

McLean, correspondent for Bernsen's International Press Service Ltd., London, England, will show pictures taken all over the world and recount adventures in the Far East and Malayan jungles.

His illustrated stories have appeared in magazines in many countries, said Ron Ainsworth, club spokesman.

CRA Calendar

(Convair Recreation Association has some 40 activities in operation. For information on Convair sports, call CRA headquarters, ext. 1245, Plant 1.)

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AEROMODELERS — Now reorganizing, call CRA headquarters, ext. 1245, Plant 1.

ARCHERY — Semi-annual trophy shoot Sept. 10, Balboa Park Field Range. Registration starts at 8:30 a.m.; shoot at 9:30 a.m.

ASTRONOMY — Convair Astronomy Club will participate in public star party, astronomy exhibit at SD State College, Sept. 16, 7 p.m. to midnight.

BOWLING — Winter leagues begin next week. Call Jim Hayman, ext. 1155. Organization of Twilight Trios in progress. Call Mike Brooks after 9 a.m. at HO-9-8793.

BRIDGE CLUB — Sessions every Tuesday, 7:30 p.m., Barcelona Hotel, 326 Juniper St.

CAMERA CLUB — Meeting Sept. 11, 7:30 p.m., Photo Arts Bldg., Balboa Park.

GOLF — CRA plant championships, Circle R, Sept. 9-16-23.

MODEL RAILROAD — Meetings each Friday, 7:30 p.m., House of Charm, Balboa Park.

MOVIES—Reduced price movies each Friday, Saturday, Sunday at Adams Theater, 3325 Adams Ave. Admission: adults, 50¢; children under 12 free if accompanied by adult.

PISTOL CLUB — Next shoot Sept. 10, 9 a.m., San Diego Police Pistol Range, Federal Blvd. and Home Ave.

RADIO CLUB—Meeting tomorrow (Aug. 31), 8 p.m., Harbor Drive headquarters. T. M. Hemphill, guest speaker.

RIDING CLUB—Meeting Sept. 7, 8 p.m., Gillespie Field Clubhouse. Campout and trail ride Sept. 9-10.

ROAD RUNNERS—Labor Day weekend outing to Hulburd's Grove, Sept. 1-4.

ROCKHOUNDS — Rockhound Shack reopens Sept. 12. Instruction for day shift, Tuesdays and Wednesdays, 7-9 p.m.; night shift, Tuesdays, 12:30-2:30 p.m.

SPORTS CAR CLUB — Weekend motorcade to Santa Barbara, Sept. 2-3. Meeting and driving event Sept. 6, 7:30 p.m., Natural History Museum, Balboa Park. Driving test of skill follows at SD Zoo parking lot.

SQUARE DANCING — Beginners' classes start Sept. 14, American Legion Hall, 4061 Fairmount Ave.

SWIM NIGHT — Free family swim night Sept. 9 at Mission Beach Plunge, 7-9 p.m. Tickets at employee services counter.

WATER SKI CLUB — Skiing Sept. 2 and 9, 6:30-11 a.m., Santa Clara Point; 11 a.m. to 1 p.m., Tierra del Fuego. Sept. 4, breakfast ski event, 6-11 a.m., Santa Clara; Sept. 10, skiing 9 a.m.-1 p.m., Tierra del Fuego; Sept. 13, evening skiing, 5:30-8 p.m., Santa Clara. Call G. Sevigny, ext. 1032.

WOMENS' ACTIVITIES — Registration open to beginning charm school starting Sept. 20. Tickets on sale tomorrow to fall fashion show, Oct. 18. Call ext. 1245, Plant 1.

Circus Tickets Sell Quickly

Circus tickets went like proverbial hotcakes as hundreds waited, dollars in hand, to get choice seats when the bargain-rate ducats went on sale in GD/Convair employee services Aug. 17.

Over 2,000 tickets to the coming Ringling Bros. and Barnum and Bailey performance for General Dynamics people were snatched up in the first three days by GD/Convair mothers, fathers, and children of all ages.

Many bought them in quantity lots—as many as 20 and 30 at a time. They will be taking their Little Leaguers, cub scouters, and all the neighborhood children to see the big show on Sept. 14.

However, there are still a number of good seats available, said J. K. Field, chief of employee services. GD/Convair and GD/Electronics people may still buy the CRA reduced-rate tickets at $1 apiece as long as they last at both Plant 1 and 2 employee services and at Rose Canyon in the office of Virginia Cannon, ext. R.C. 2125.

The circus will perform in Westgate Park at 8 p.m. on the Thursday night date to a full house of General Dynamics' bigtop lovers. The entire stadium was reserved for that night only for GD/Convair and GD/Astro.

Rose Canyon Wins Opener

Rose Canyon had a good chance to cinch the shop league softball championship if it won the second play-off game last Friday.

Up until press time, the Rose Canyon nine was in the lead by defeating Dept. 137, first-round winner, in the first play-off last Monday, 4-0. If Dept. 137 dropped the Rose Canyon team to tie up the best-of-three series, the two were to battle it out this Monday night.

Rose Canyon wound up second round of shop play as undisputed winner, sweeping all its games. In final tilts it beat out Dept. 135 by 9 to 3, and Electronics, 12-8.

Other games winding up the 1961 season saw Material winning one from Dept. 97, 7-0; Dept. 135 turned around to snow under Material, 9-0; Dept. 137 won over Dept. 97, 7-0; and Dynamics took a big one from Dept. 400, 18-1.

Shop league winners and all managers will be included in the awards dinner Sept. 12 in the Convair cafeteria, said Pete Beyrer, CRA softball commissioner.

The dinner is being held for all winning teams in City League play with trophies to be handed out at that time to some 20 teams, including Convair Eagles, champions of the Industrial A League.

Last Musicals Set For Theater Season

Sale of tickets to final Circle Arts Theatre and Starlight Opera productions will start tomorrow (Aug. 31) morning at 9 a.m. at Convair employee services.

"Flower Drum Song," will conclude the Starlight operetta menu for this year with Convair night on Sunday (Sept. 10). Discount price to employees is $2.45 for $3.50 seats.

Winding up the inaugural season for Circle Arts is "The Pajama Game," starring John Raitt. Reduced prices for the Sept. 17 showing are $2.75, $2.20, $1.80, and $1.40.

GD/ELECTRONICS COUPLES WED

Two General Dynamics/Electronics employees at the San Diego manufacturing facility announced recent marriages. Ruth Miles was married July 27 to Frank D. Pritchett of Pope, Ala., and Bill Hutchison, potting lab technician, was married Aug. 25 to Pamela O'Laughlin.

Sports & Recreation



BARGAIN DAY—Martha Woodberry of Convair employee services (left) sells Genevieve Day (Dept. 31) one of first blocks of tickets to Ringling Bros. circus as hundreds line up to get CRA-reduced rates to "big show."

Beginning Sq. Dance Classes Will Resume During September

Beginning square dancing classes resume for Convair people the middle of next month, reminded Maury Scholz, CRA commissioner.

First session will be Sept. 14 with registration open to all newcomers at that time, or the two following classes, Sept. 21 and 28. Anyone interested in learning the fine art of square dancing is urged to turn out on those Thursdays at 8 p.m. in the American Legion Hall, 4061 Fairmount Ave.

Singles and couples may join, said Scholz, with room for 30 squares, or 240 people. Don Browne, experienced instructor and caller who has conducted classes for Convair dancers the last two years, will lead beginners through their paces.

Advanced and intermediate square dancing is held each Tuesday night the year around at the American Legion Hall at 8 o'clock. There are now about 80 expert dancers taking part with any other Convair people welcomed if they have had training. The more experienced dancers hold their party night the fourth Saturday of each month. Last weekend they joined in their annual Hawaiian luau.

Planning is getting under way for the annual all-General Dynamics Hoedown and Jamboree to be hosted by the Convair Hoedowners Oct. 28. Square dancers from Astronautics and Pomona will join in the yearly get-together.

SWIM NIGHT POSTPONED TO SECOND SATURDAY

Regular monthly swim night for Convair families will be postponed a week next month because of the Labor Day weekend.

It is set for the second Saturday (Sept. 9). Tickets for the free swim night at Mission Beach Plunge may be picked up at employee services.

'Red, White and Blue' Coin Display Wins Club's Quarterly Contest

A patriotic display won best of show at the third quarterly contest of the Convair Coin Club at its Aug. 17 meeting.

Caroline Fink (wife of W. F. Fink, Astro Dept. 535-9) took the overall trophy for her exhibit of proof coins in red, white, and blue plastic holders. E. L. Lampe, (Dept. 180) won first-place ribbon in the adult division for his type sets of U.S. minor coins. Included in his collection were coins now extinct, including the half-cent, three-cent in both nickel and silver, two-cent, and half-dime.

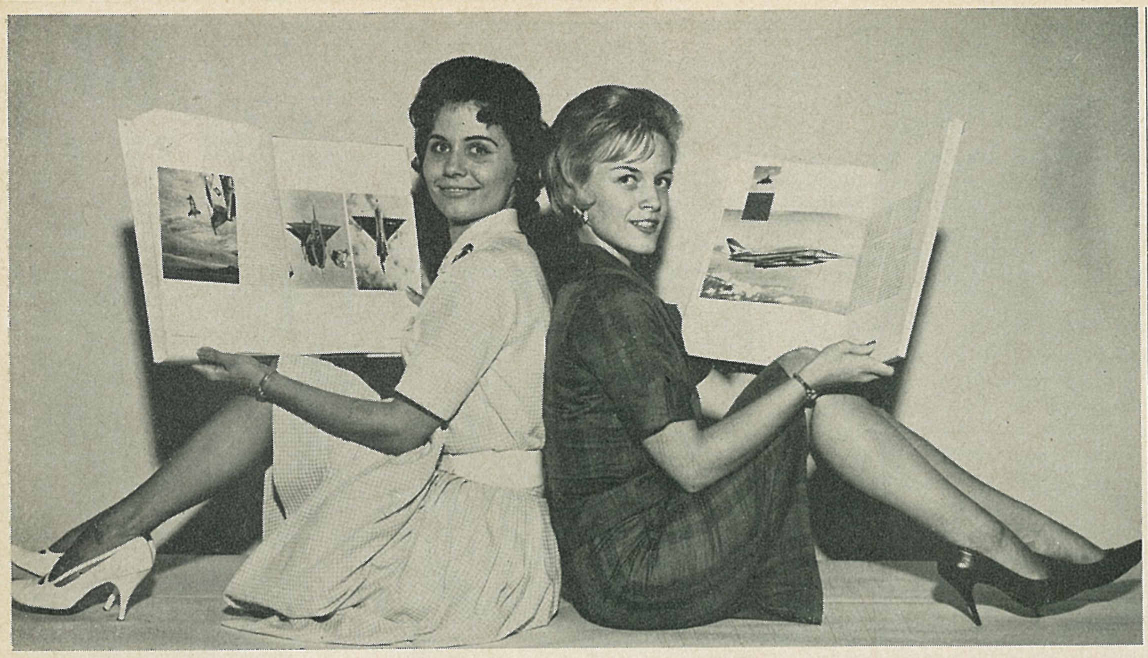
Winning the junior top ribbon was Andy McCormack, son of B. D. McCormack (Dept. 400-3), with his type set of small U.S. cent pieces. They dated from 1857 to 1961 and included the flying eagle, Indian white, Indian bronze, Lincoln head in both copper and steel, and Lincoln Memorial.

Forty members and guests were present at the contest which was especially arranged for benefit of beginning collectors, said Al Baber, president. Business discussion concentrated on revision of auction rules with a committee appointed to submit recommendations at the Sept. 21 meeting. Frank White as chairman and Steve Ames, vice chairman, head a committee of five, said Baber.

F. G. Sneed Jr. won the 1961 proof set in the members only drawing and Veal Bowers, the door prize.



COLLECTORS — Numismatists exhibiting in CRA Coin Club's recent quarterly contest are (left to right) A. S. Laiuppa (GD/E Dept. 5); E. L. Lampe (Dept. 180); I. B. Knickerbocker; A. L. Baber, club president; Andy McCormack; Caroline Fink; Vince Bacon (Dept. 6); Clem Scott. Mrs. Fink's winning display is in foreground.



SHAPELY "BOOK ENDS"—Nancy Hagan, left and Rose McDaniel, both GD/Astronautics, browse "Dynamic America" copies which will go on special sale to employees middle of September at all facilities. Profusely illustrated, multi-color volume profiles history of General Dynamics. Sold nationally in book stores at $20, cost to employees is $7.50.

B-58 Flights Will Test Turbulence Response

A series of subsonic, low-level flights will be made in Hustler No. 7 during the next few months to measure the B-58's response to atmospheric turbulence.

Runs will be made from 500 to 1,500 feet above terrain in a corridor extending from a point four miles east of Jacksboro north to eight miles west of Kingfisher, Okla. Federal Aviation Agency set down requirements for the corridor.

"We're planning to make the most of the flights during the middle six or seven hours of the day," said Harold Johnson, team captain.

Val Prahl will be project pilot during the demonstrations, with either Paul Brewer or Max Runnion in third station.

Second station of No. 7 contains electronics gear, used over the past few months in a series of air and gust-load demonstrations. Purpose is to demonstrate the Hustler's structural integrity.

The Hustler's reaction to turbulence will be picked up by strain gages and accelerometers placed strategically over the airframe.

In addition, a gust probe will be used to sense pressure changes and determine gust velocity.

"In effect, we'll be attempting to determine characteristics of the air as well as measure the B-58's reaction to it," Johnson pointed out.

He said meteorologists are now extensively exploring the relatively new phenomenon of "clear air turbulence."

Information concerning the flights—including maps of the corridor area—are being mailed to airports in Texas and Oklahoma, Johnson said.

Special $7.50 Price Set On 'Dynamic America'

"Dynamic America," story of General Dynamics Corporation and its predecessor companies, will be offered all General Dynamics employees next month at a special discount price.

A limited number of copies of the 426-page volume will go on sale at all divisions Sept. 15.

Price to General Dynamics employees will be $7.50. The book is being sold regularly at book stores for $20.

"Dynamic America" profiles the history of General Dynamics in terms of how the company's products have affected the course of industrial progress. It contains more than 1,000 illustrations, more than half in color. Published by Doubleday and Company, the book was five years in preparation.

It was edited by John Niven, Courtlandt Canby, and Vernon Welsh. Erik Nitsche, internationally-recognized designer, illustrator and art director, was responsible for the book's graphic layout and topography.

Although the special price is limited to General Dynamics employees only, there will be no restriction on the number of copies which can be purchased.

Sale will be handled at GD/Convair, GD/Astro, GD/Fort Worth, and GD/Pomona through employee services. Copies will be on display at off-site facilities and orders may be forwarded to main division offices.

GD/Astro Man Wins An Oriental House

The telephone rang at 10:30 p.m. Sunday and a voice informed Harry Erwin of Dept. 535-5 at GD/Astro that he had won a house!

He was grand prize winner at a San Diego Home Show. His prize was a 21 x 24-foot lodge-type Oriental house which stood 14 feet high. It came complete with a closet and bath.

"I almost flipped," Erwin said. "All I could think of was would it fit in my yard."

Erwin settled the problem by simply selling it.

Astro Hydro-Chemical Facility Forms Parts in a Split Second

Extensive testing and limited production is in progress at General Dynamics/Astronautics' new hydro-chemical forming facility of the main plant.

The company-owned installation includes explosives magazines, a utility building, and a forming tank with assorted handling equipment. The present tank installation is 12 feet in diameter and 10 feet deep, and will handle parts of approximately the same dimensions. Larger facilities are planned for future additions.

Greatly reduced tooling costs are seen as a major advantage of hydro-chemical forming. Only a single die is required to form most parts.

Sheets of metal (the blank) to be formed are placed over the die and lowered into the tank. A vacuum is introduced between the die and the blank. An explosive charge suspended just below the surface of the water is detonated. Shock waves set up by the explosion force the material into the die, shaping a precision part in a split second.

Representative savings in time, tooling and material are reflected in bell-shaped transducer housings now in production. The housing's complex curves are precisely shaped, using a single die and about one-half ounce of explosive. Formerly, three separate dies were needed to shape by conventional means.

This feature—the ability to shape parts from a single die rather than many detailed parts—is one of the key features.

Utilization of the area falls jointly to applied manufacturing research and process development (Dept. 290) and sheet metal (Dept. 732). Walter K. Beyer and W. C. Wilson are Dept. 290 project engineers. Dept. 732 is represented by Art Wright, assistant foreman; J. A. Brown, R. K. Wall, E. E. Raynor and L. H. Wetherington.

"Thus far we have used stainless steel, aluminum and Monel for forming," said Beyer. "Shaping more exotic materials and experiments in bonding dissimilar metals—making a permanent aluminum and steel 'sandwich,' for example—will begin in the near future."

MANAGEMENT CLUBS TO MEET ON COAST

Representatives from four General Dynamics Management clubs will hold a two-day conference in San Diego Sept. 13 and 14.

R. H. Biron, General Dynamics senior vice president-industrial relations, is hosting the meet, aimed at "acquainting each club president with activities of the other clubs and to derive solutions to problems common to all."

Represented will be Management Clubs from Fort Worth, Convair, Astronautics and Pomona.

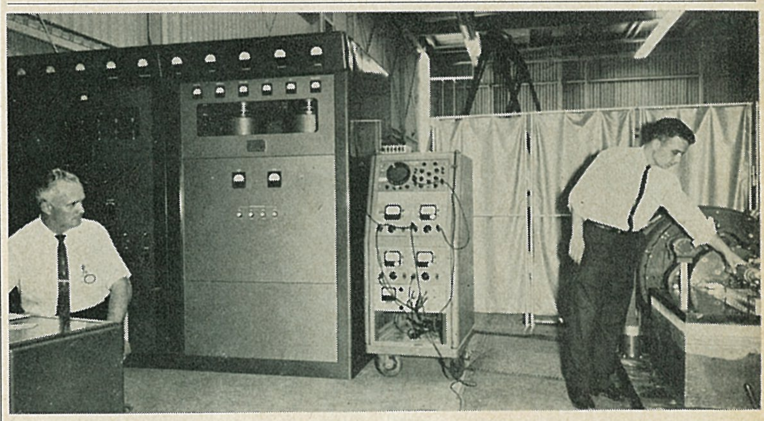
Delegates will be guests at the September dinner meeting of the GD/Astronautics Management Club.

Heller of Pomona On Navy Committee

E. D. Heller, value control coordinator at General Dynamics/Pomona, has been appointed a member of the Value Engineering Committee to the Bureau of Naval Weapons Industry Material Reliability Advisory Board.

The appointment, announced recently by RAdm. F. L. Ashworth, Navy assistant chief for research, development, test and evaluation, is for a term of two years.

The Advisory Board operates under directives of the Department of the Navy governing public advisory committees.



DOUBLE POWER—W. N. Hosmer, (left), at control console of newly-installed electronic power supply in GD/Convair systems dynamics lab, regulates test forces for specimen attached to vibration exciter at right. J. K. Giel, systems dynamics test engineer, points out part under vibration testing. Power amplifier is in left background.

New Power Supply Doubles Vibration Testing Capabilities

New equipment in General Dynamics/Convair systems dynamics test laboratories has more than doubled vibration testing capabilities.

Accepted this month was an electronic power supply consisting of a power amplifier with 30 KVA output power and a control console, both designed and built by Ling Electronics Division of Ling Temco Corp., Anaheim, Calif.

M. C. Brady, systems dynamics lab chief, said that installation of the improved power supply, considered one of the most modern in use, will make possible accurate testing of components now in design stages for advanced projects.

"The Ling power supply will enable us to test missile or spacecraft components as if they were on launch pad, taking high-level forces of lift-off," said W. N. Hosmer, lead engineer. "Under such extreme stresses, components are subjected to two kinds of vibration simultaneously, vibrations within themselves—or sine wave vibration—and vibrations from the engines which go throughout the entire structure—random wave vibration.

"The new power equipment more than doubles power for sine wave testing—vibration on a single frequency in one given instance—and ten times the power for random wave tests."

Vibration testing is done by test engineers of systems dynamics components group under supervision of Howard Bard.

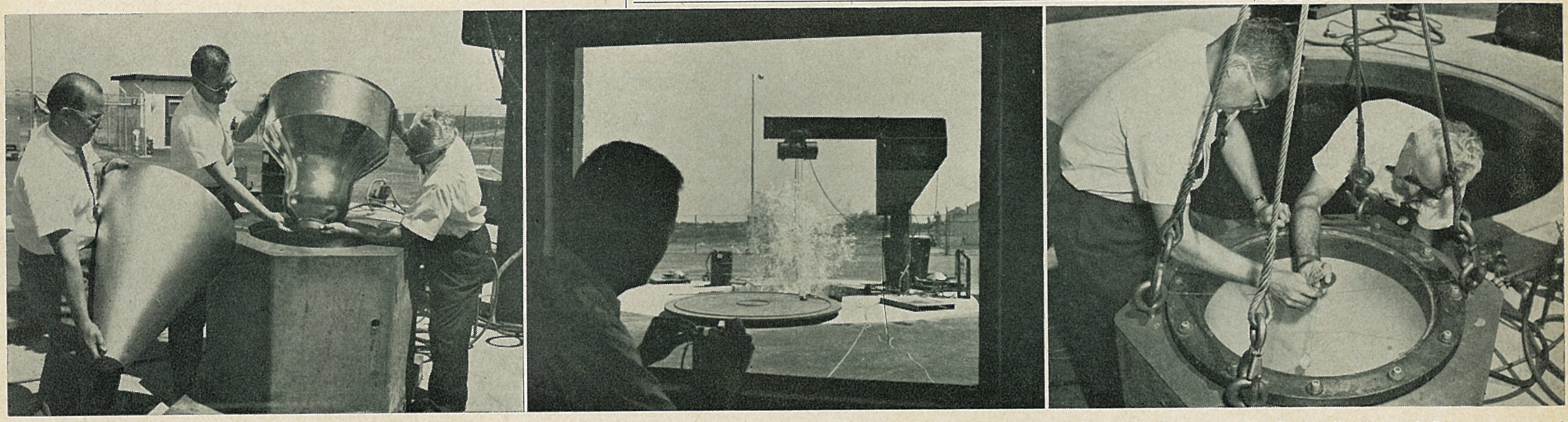
The electronic power supply can activate two vibration exciters (or shakers) at one time to produce a total force of 7,000 lbs. Test specimens are connected to the exciters and subjected to controlled vibration forces.

Now in the Bldg. 72 test lab for initial testing with the recently-installed power equipment are Atlas engine actuators, parts which position the engine on the ICBM. Qualification tests will be started soon on the screw jack of the Convair 990 horizontal stabilizer.

Three-Day Weekend Set Over Labor Day

A three-day holiday is in store for General Dynamics Corporation folk everywhere this coming weekend.

With Labor Day falling on next Monday (Sept. 4), General Dynamics divisions will be closed that day, with the exception of essential security and maintenance personnel. Regular working hours will be observed the following day, Tuesday (Sept. 5).



SPECTACULAR—At left, Art Wright holds sheet metal blank for comparison as W. C. Wilson and W. K. Beyer lift finished shape from die following hydro-chemical forming at GD/Astro facility. At far right, Wilson and Beyer suspend half-ounce explosive charge in loaded die. In center, Wilson sets off charge.